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## The Electronic Lawyer

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# THE ELECTRONIC LAWYER

*Richard L. Marcus\**

## I. INTRODUCTION

The organizers of this conference have asked us to reflect on future challenges for the legal profession.<sup>1</sup> I begin with an image from popular culture. Anyone who has seen the movie *Michael Clayton* has seen one vision of the future (or possibly contemporary) American lawyer.<sup>2</sup> In the movie, George Clooney plays the title role as a lawyer who works for a 600-lawyer New York law firm that is acting as the “fixer” for a large agricultural products company sued for allegedly causing the deaths of small farmers in the Midwest. The head of the litigation department, who is in charge of the case, “gets religion” when he discovers incriminating documents in the client’s files, and declares that he will bring down the company. Michael Clayton is the law firm’s fixer, and his job is to rein in the wayward litigation chief. But that proves difficult, and the client resorts to illegal means to contain things.

As one surveys the possibilities and challenges of the organized American bar during the coming decades, *Michael Clayton* might be one vision (or nightmare) to contemplate.<sup>3</sup> In a way, the film illustrates the dilemma that Dean Kronman addressed sixteen years ago in his book *The Lost Lawyer*.<sup>4</sup> He contrasted the contemporary role of American lawyers with the image of the sage advisor of old, a professional who truly gave direction to the client and acted on some level as a moral compass. Dean Kronman’s lawyer was anything but a fixer.

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1. This Article builds on my comments during the Fourteenth Annual Clifford Symposium on Tort Law and Social Policy at the DePaul University College of Law on April 4, 2008. The Symposium was entitled *The Challenge of 2020: Preparing a Civil Justice Reform Agenda for the Coming Decade*.

2. MICHAEL CLAYTON (Warner Brothers Pictures 2007).

3. I note that I am not the first to latch onto the movie as fodder for law review analysis. See Thomas L. Shaffer, *Business Lawyers, Baseball Players, and the Hebrew Prophets*, 42 VAL. U. L. REV. 1063, 1063 n.1 (2008) (invoking *Michael Clayton*).

4. ANTHONY T. KRONMAN, *THE LOST LAWYER: FAILING IDEALS OF THE LEGAL PROFESSION* (1993).

Kronman mourned that the modern lawyer, in contrast, has become “an accomplished technician” without “a wisdom that lies beyond technique.”<sup>5</sup> Lawyers are now one-dimensional rather than serving as broad-based guides for their clients.<sup>6</sup>

My focus is narrower than Dean Kronman’s; I focus on the role of products depending on electricity in this supposed transformation. In *Michael Clayton*, electronic technology is pervasive. In the modern lawyer’s life, it is also pervasive. It is certainly tempting to say that electronic technology is a prime cause—or at least a critical facilitator—of the role of the lawyer today. To the extent that one focuses on big law firms (like the fictional one in *Michael Clayton*), the role of technology has been a longstanding feature of legal practice. Thus, Professors Galanter and Palay recognized in 1991 that “[t]he emergence of the big firm is associated with the introduction of new office technologies,”<sup>7</sup> and they quoted a lawyer who wrote in 1914 that the introduction of the telephone “completely revolutionized” methods of transacting legal business.<sup>8</sup>

Surely the variety of electronic gadgets the Electronic Lawyer now possesses far outstrips those available to the 1914 attorney. Lawyers now employ, rely upon, and to some extent are captives of cellphones, BlackBerries (also known to some as “CrackBerries”), instant messaging, instantaneous electronic research, word processing, electronic filing, and a myriad of other gadget-facilitated activities. Dean Kronman recognized that the introduction of the computer placed pressure on his sage lawyers by reducing turn-around time and curtailment time for introspection.<sup>9</sup> The introduction of additional gadgets in the fifteen years since Kronman wrote has surely accelerated the trend.

Against this background, I intend to offer some thoughts about where these technological developments may lead and their possible effect on the legal profession.<sup>10</sup> Of necessity, this sketch will be impressionistic, speculative, and general. I begin with a comparison to the medical profession, which may be undergoing transformative

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5. *Id.* at 2.

6. *See id.* at 307–09.

7. MARC GALANTER & THOMAS PALAY, TOURNAMENT OF LAWYERS: THE TRANSFORMATION OF THE BIG LAW FIRM 7 (1991).

8. *Id.* (quoting THERON G. STRONG, LANDMARKS OF A LAWYER’S LIFETIME 396 (1914)).

9. *See* KRONMAN, *supra* note 4, at 302–06.

10. This work builds on earlier work. *See* Richard Marcus, *The Impact of Computers on the Legal Profession: Evolution or Revolution?*, 102 Nw. U. L. REV. 1827 (2007) (examining the extent to which the introduction of computers has altered what lawyers do).

changes due in part to electronic technology.<sup>11</sup> I then turn to a variety of aspects of legal practice and consider the ways in which the Electronic Lawyer may differ from her predecessors. One possibility is that computers might themselves replace lawyers as providers of legal services, but this does not seem imminent.<sup>12</sup> At the same time, the electronic law office has evolved far beyond the law office of the mid-twentieth century, with attendant implications for law practice.<sup>13</sup> Moreover, the profession itself may be moving towards a two-tier reality, although the impact of electronic devices in furthering that trend is doubtful.<sup>14</sup> But the extensive reach of electronic communications in legal representation of clients may place greater stresses on our balkanized system of lawyer regulation.<sup>15</sup> Electronic communications present new challenges on a number of other fronts: the attorney-client privilege, the growing scope of citizen surveillance, and the manner in which law schools train new lawyers.<sup>16</sup> Despite all these potential impacts, however, I believe we must be cautious about a sentimentalized attitude toward the various golden ages of legal practice in the past, and skeptical about the extent to which technology has threatened them or made them disappear.<sup>17</sup> Accordingly, it seems to me that the Electronic Lawyer actually has more in common with her non-electronic predecessor than she may appreciate.

## II. THE ELECTRONIC DOCTOR

Medicine . . . would have been seen only a century ago to have been largely outside the realm of technology, whereas today it is one of the most thoroughly technological fields any of us will encounter.<sup>18</sup>

One way of approaching the Electronic Lawyer is to consider a comparable vision of another profession—the electronic doctor. It is often said that doctors and lawyers are the best established professions,<sup>19</sup> so there is the possibility of parallelism.<sup>20</sup>

There are at least some parallels. For example, a study of “physician discontent” suggested that “lawyers are no more satisfied, and

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11. See *infra* notes 18–63 and accompanying text.

12. See *infra* notes 64–107 and accompanying text.

13. See *infra* notes 108–135 and accompanying text.

14. See *infra* notes 136–148 and accompanying text.

15. See *infra* notes 149–175 and accompanying text.

16. See *infra* notes 176–238 and accompanying text.

17. See *infra* notes 239–270 and accompanying text.

18. ROBERT FRIEDEL, *A CULTURE OF IMPROVEMENT: TECHNOLOGY AND THE WESTERN MILLENNIUM 1* (2007).

19. See, e.g., C. WRIGHT MILLS, *WHITE COLLAR: THE AMERICAN MIDDLE CLASSES* 113 (1951) (referring to “the old professions, such as medicine and law”).

20. For further discussion of this possible parallelism, see Marcus, *supra* note 10.

perhaps are more dissatisfied, than physicians.”<sup>21</sup> For lawyers, the dynamics of competition and law firms’ pursuit of ever-increasing profits—along with declining loyalty from corporate clients—seem to contribute to attorney anomie,<sup>22</sup> while for doctors the advent of managed care may loom large. At least some in the legal world have begun to focus on the “new medical marketplace” and the difficulties presented when patients are approached solely as consumers;<sup>23</sup> other similar forces may be at work in the medical profession, as well.

Other parallels seem to exist. Those who teach in law schools are familiar with the phenomenon of rising student debt, with its attendant constraints on the career choices of graduates who express a preference for public interest law but nonetheless flock to higher paying law firm jobs. For similar reasons, medical students are reportedly flocking to higher paying specialties and forsaking family medicine.<sup>24</sup> Another similarity is the growing concern with life-work balance in the medical profession. In law firms, such concerns have also grown in importance.<sup>25</sup> Similarly, we are told that “U.S. medicine is in the middle of a cultural revolution, as young physicians intent on balancing work and family challenge the assumption that a doctor should be available to treat patients around the clock.”<sup>26</sup> This shift is contribut-

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21. David Mechanic, *Physician Discontent: Challenges and Opportunities*, 290 J. AM. MED. ASS’N 941, 941 (2003).

22. See Marcus, *supra* note 10, at 1851–52.

23. See, e.g., Mark A. Hall & Carl E. Schneider, *Patients as Consumers: Courts, Contracts, and the New Medical Marketplace*, 106 MICH. L. REV. 643 (2008) (analyzing the courts’ reaction to the advent of managed care and the overcharging of patients who do not have insurance).

24. See Natasha Singer, *For Top Medical Students, Appearance Offers an Attractive Field*, N.Y. TIMES, Mar. 19, 2008, at A1 (reporting on the growing popularity of dermatology and plastic surgery, which are the most competitive fields to enter). While the dermatology and plastic surgery fields are becoming increasingly competitive, family and internal medicine enjoy much less popularity among top medical students:

Until recently, saving skin did not have the cachet of saving lives. Doctors in other fields jokingly dismissed dermatology as a province of red-spot diseases that could not really be cured, but weren’t going to kill patients. Twenty-five years ago, the fiercest competition among medical students was for internal medicine and general surgery.

*Id.*

25. See, e.g., Ross Todd, *Eyeing the Door*, AM. LAW., Aug. 2008, at 113 (reporting that, in light of the workload of junior partners, today’s associates “think that they *could* make partner, [but] they’re not sure they *want* to”); Emmett Berg, *Stop the Partnership Track, I Want to Get Off*, CAL. LAW., Aug. 2008, at 12 (reporting that “the younger generation’s desire for better work/life balance” has taken the shine off the partnership track); Marisa McQuicken, *Rebels with a Cause: Students Seek a More Reasonable Law Firm Life—Before They Even Start*, LEGAL TIMES, Sept. 3, 2007, at 26 (describing resistance among law students to a “law firm culture bereft of work-life balance”).

26. Jacob Goldstein, *As Doctors Get a Life, Strains Show*, WALL ST. J., Apr. 29, 2008, at A1.

ing to the appeal of some higher paying positions such as dermatology, which also offer more predictable work hours.<sup>27</sup>

But one must be careful not to emphasize the parallels between medicine and law too forcefully. For example, we are also told that problems of life-work balance are deterring medical students from pursuing careers in academic medicine.<sup>28</sup> Although law schools may sometimes have difficulty persuading promising candidates to work for lower salaries than law firms offer, it is hard to believe that many candidates who are in law practice are put off by the long hours required of law professors; indeed, one lure of a law faculty job is the desirable work-life balance it makes possible. Much as law schools may try to ease the tuition burden on graduates who take public interest jobs, law schools are not likely to do the same for those who pursue professor positions. But at least some medical schools are pursuing tuition breaks for students in hopes of prompting them to pursue academic jobs.<sup>29</sup> Even more remarkable from the law school perspective is the seeming suggestion that the medical profession needs more academics to conduct research on topics such as new treatments.<sup>30</sup> One need not agree with Judge Edwards that law professors and practicing lawyers are on divergent paths<sup>31</sup> to recognize that nobody would pretend that the American bar would be hamstrung in providing legal representation if deprived of the research output of the American legal professoriate.

So any parallels must be examined carefully. For purposes of our focus, one might think at first that the electronic doctor would be less different from predecessors than the Electronic Lawyer. For one thing, lawyers frequently provide advice to a client who is an inani-

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27. *Id.* Goldstein reports:

Many [new doctors] are eschewing fields such as internal medicine, pediatrics, and family medicine, choosing instead specialties that offer both higher pay and more predictable work hours. In family medicine, for example, hundreds of medical residency positions go unfilled every year. But competition for slots in dermatology residencies is fierce.

*Id.*

28. See Shirley S. Wang, *Cleveland Clinic's Medical School to Offer Tuition-Free Education*, WALL ST. J., May 15, 2008, at D3 (quoting an expert who described the demands of academic careers in medicine and said that "[s]ome students feel that those kinds of demands would be difficult for them to meet while also trying to obtain some sense of work-life balance").

29. See *id.* (reporting on plan of Cleveland Clinic to offer tuition-free medical education to encourage top students to enter academic medicine).

30. See *id.* (quoting medical school dean who says that "there is a need for more [academics] in the profession").

31. Harry T. Edwards, *The Growing Disjunction Between Legal Education and the Legal Profession*, 91 MICH. L. REV. 34 (1992) (decrying the extent to which legal scholarship and legal education have lost interest in what actual lawyers and judges do).

mate entity like a corporation or a governmental body. Doctors, on the other hand, only provide professional services to human patients. Lawyers' advice often depends on documentary materials (or electronically stored information), and they may have no need to "examine" a human being to provide advice. In many instances, lawyers seek both "diagnostic" and "treatment" information in a law library, not from the client. Doctors' advice is *about* a human patient, and although much diagnostic and treatment information can come from medical literature, human input from the actual patient seems crucial to making that information pertinent to this case.

Despite all this, it may be that the transformation wrought by the electronic doctor looms larger than that produced by the advent of the Electronic Lawyer. In facilitating a medical diagnosis, electronic devices have long been important, and they now have an even more prominent role. Perhaps the X-ray machine was the first electronic device widely used for diagnosis, but it has been joined by a wide variety of others, particularly as the computer age has become more pervasive. Indeed, if one asked whether a doctor would be more likely justified in reaching a diagnosis by relying solely on electronic devices or solely on personal interaction with the patient, it might well be that the electronic route would be the more reliable one.

One illustration is the possibility of online interaction to replace the face-to-face doctor-patient relationship of the past. Increasingly, doctors may offer treatment to patients in remote locations through online interaction rather than face-to-face examination.<sup>32</sup> This possibility may be enhanced if cellphones could cheaply be turned into a digital microscope that would help with remote diagnosis.<sup>33</sup> This development raises the possibility that "[t]he mobile phone may join the stethoscope and the thermometer as an indispensable piece of medical kit."<sup>34</sup> When one considers that an estimated 3.3 billion peo-

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32. See, e.g., Erin Allday, *Online Visits a Boon for Far-Off Patients*, S.F. CHRON., May 27, 2007, at B1. This article describes doctors treating "virtual" patients—real people who will never meet face-to-face with their physician" at the University of California San Francisco, adding that the UCSF program "is modeled on an online consultation program at the Cleveland Clinic in Ohio, which was one of the first medical centers in the world to offer interactive medical services on the Internet." *Id.*

33. See *Doctor on Call*, ECONOMIST, May 17, 2008, at 100 (describing the development of CellScope, a device that can be attached to a mobile phone to turn the phone into a microscope, permitting transmittal of an image showing individual white and red blood cells that can be used to identify such parasites as the one that causes malaria); see also *Sticky Fingers*, ECONOMIST, Aug. 9, 2008, at 77 (reporting that desorption electrospray ionization may enable doctors to diagnose patients by using this method to scan a portion of their skin).

34. See *Doctors on Call*, *supra* note 33, at 100.

ple—half the world population—now possess cellular phones,<sup>35</sup> the changes that the electronic doctor confronts begin to become apparent. Moreover, there are efforts afoot to use implanted sensors to monitor people with certain medical conditions and identify problems before the patient is aware of them.<sup>36</sup> And the electronic doctor can use the Internet to obtain input from other electronic doctors on tough cases.<sup>37</sup> Indeed, the electronic doctor may be too enamored of such devices; the *New York Times* reports on what it calls a “trend in American medicine” that “faith in innovation, often driven by financial incentives, encourages American doctors and hospitals to adopt new technologies even without proof that they work better than older techniques.”<sup>38</sup>

Once the data on the patient are in, however, even the electronic doctor might revert to the role of the doctor of old in reaching a diagnosis, albeit with more information. But the electronic data increase may have changed the nature of the doctor’s diagnostic role also. Twenty years ago, informed observers reported that “increased biomedical knowledge and technological capability have increased rather than reduced the complexity and difficulty of the clinician’s task.”<sup>39</sup> Surely the explosion of medical knowledge since then has magnified this task. Perhaps the computer is necessary also to evaluate all this information. More than sixty years ago, a psychologist suggested that a computer would be better in making treatment decisions for a patient than a doctor.<sup>40</sup> Two decades ago, it was said that “medicine is almost certainly the largest, non-military area of application for both traditional and knowledge-based decision technologies.”<sup>41</sup> More than thirty years ago, efforts to use artificial intelligence for diagnosis were

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35. See *Halfway There*, *ECONOMIST*, May 31, 2008, at 68 (“Sometime in the next few months, the number of mobile phones in use will exceed 3.3 billion, or half the world’s population.”).

36. *Telemedicine Comes Home*, *ECONOMIST TECH. Q.*, June 7, 2008, at 28, 28–30 (describing use of sensors).

37. See Jessica E. Vascellaro, *Social Networking Goes Professional*, *WALL ST. J.*, Aug. 28, 2007, at D1 (describing a networking site for doctors that some 25,000 doctors visit regularly to consult with colleagues about diagnoses and treatments).

38. Alex Berenson & Reed Abelson, *Weighing the Costs of a Look Inside the Heart*, *N.Y. TIMES*, June 29, 2008, at 1 (focusing on the possible overuse of CT scanners for detailed scans of the heart).

39. *PROFESSIONAL JUDGMENT: A READER IN CLINICAL DECISION MAKING 2* (Jack Dowie & Arthur Elstein eds., 1988) [hereinafter *PROFESSIONAL JUDGMENT*].

40. See *Logical Endings*, *ECONOMIST*, Mar. 17, 2007, at 85 (describing Theodore Sarbin’s suggestion in 1947 that “a doctor is really just a machine whose purpose is to make actuarial judgments about the best treatment for a patient,” and urging that consideration be given to replacing the doctor with a computer).

41. John Fox, *Formal and Knowledge-Based Methods in Decision Technology*, in *PROFESSIONAL JUDGMENT*, *supra* note 39, at 226.



beginning.<sup>42</sup> One study found that by the 1980s computerized diagnoses were more accurate than those of doctors,<sup>43</sup> and more than a decade ago it was asserted that “[t]he physician became a purveyor of technology.”<sup>44</sup> Perhaps it will soon be true that a cellphone in the field could feed information to the computer in the “doctor’s office,” which in turn would generate a proposed treatment and communicate it back to the cellphone in the field—truly the electronic doctor!

Treatment itself might also differ with the electronic doctor. Thus, we are told that “[f]ans of genomics have long argued that decoding genomes one person at a time would revolutionise health care by leading to ‘personalised’ medicine, in which doctors match the treatment to the individual.”<sup>45</sup> Some surgeons are being supplanted by computer-controlled robots: “In prostate surgery, it is rapidly becoming unusual for a urologist to operate without using” a robot.<sup>46</sup> In May 2008, a robot was used to remove a brain tumor for the first time.<sup>47</sup> “Robots are more precise with a scalpel or laser than a person could ever be. And they can enter the body through a small ‘keyhole’ incision no bigger than 2 cm (0.8 inches), which means that surgery is less invasive. That improves the prognosis and speeds convalescence.”<sup>48</sup>

Even something so simple as using computers to keep medical records might cause a major change in the delivery of medical care. The *New York Times*, for example, reports on efforts to persuade New York to shift to using computers to prepare patient records by using as an example a doctor who graduated from medical school in 1962 and regards the shift to computerized record-keeping to be “as profound a

42. Arthur S. Elstein & Georges Bondage, *Psychology of Clinical Reasoning*, in PROFESSIONAL JUDGMENT, *supra* note 39, at 109, 118–19; see also Jerome R. Kassirer, *A Report Card on Computer-Assisted Diagnosis—The Grade: C*, 330 NEW ENG. J. MED. 1824, 1824 (1994) (reporting that use of computers to diagnose medical conditions began in the 1950s).

43. F.T. de Dombal, *Computer-Aided Diagnosis of Acute Abdominal Pain: The British Experience*, in PROFESSIONAL JUDGMENT, *supra* note 39, at 190, 196 (cautioning that although the data indicated that computerized diagnoses were correct almost twice as frequently as the admitting doctor, the difference was not as dramatic as it seemed).

44. Kenneth I. Shine, *The Physician as Health Agent*, 729 ANNALS N.Y. ACAD. SCI. 73, 73 (1994).

45. *Getting Personal*, ECONOMIST, June 21, 2008, at 76; see also *Signs of a Long Life*, ECONOMIST, June 28, 2008, at 87 (describing a new procedure that may enable doctors to predict the diseases that will afflict given patients before any symptoms have appeared).

46. Barnaby J. Feder, *Prepping Robots for the O.R.*, N.Y. TIMES, May 4, 2008, Sunday Business, at 1.

47. *Tiny, Careful Cuts*, ECONOMIST, June 21, 2008, at 91 (adding that “[r]obots should soon be able to perform cardiac surgery without the trauma and the potential risk of breaking open the chest and plugging the patient into a heart-bypass machine”).

48. *Id.*

shift in the way he treats patients as advances in diabetes drugs.”<sup>49</sup> Another article in the *Times* says that “there is broad agreement that moving patient records into the computer age . . . is essential to improving care and curbing costs.”<sup>50</sup> This report is fairly gushing in praise of the impact of computerized records on patient care:

A paper record is a passive historical document. An electronic health record can be a vibrant tool that reminds and advises doctors. It can hold information on a patient’s visits, treatments, and condition, going back years, even decades. It can be summoned with a mouse click, not hidden in a file drawer in a remote location and thus useless in medical emergencies.

Modern computerized systems have links to online information on best practices, treatment recommendations and harmful drug interactions. The potential benefits include fewer unnecessary tests, reduced medical errors and better care so patients are less likely to require costly treatment in hospitals.<sup>51</sup>

Altogether, then, there could be a fundamental challenge to the role of doctors in the era of the electronic doctor. At least some doctors foresee such a challenge in medical practice. In his 2007 book *How Doctors Think*, Professor Jerome Groopman of Harvard Medical School argues that there has been a change in the way doctors approach their work.<sup>52</sup> He was prompted to write the book by the concern that “the next generation of doctors was being conditioned to function like a well-programmed computer that operates within a strict binary framework.”<sup>53</sup> As a proponent of doctors thinking “outside their boxes,” Dr. Groopman says that medical students are now “taught to follow preset algorithms and practice guidelines in the form of decision trees,” and that “algorithms discourage physicians from thinking independently and creatively.”<sup>54</sup> In essence, he sees the electronic doctor as a threat to important aspects of medical practice:

Electronic technology can help organize vast clinical information and make it more accessible, but it can also drive a wedge between doctor and patient when used in this way to increase “efficiency.” It also risks more cognitive errors, because the doctor’s mind is set on filling in the blanks on the template. He is less likely to engage in

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49. Anemona Hartocollis, *Looking to Private Records for Public Health Goals*, N.Y. TIMES, Dec. 30, 2008, at A18.

50. Steve Lohr, *Health Care that Puts a Computer on the Team*, N.Y. TIMES, Dec. 27, 2008, at B1.

51. *Id.*

52. JEROME GROOPMAN, *HOW DOCTORS THINK* (2007).

53. *Id.* at 6.

54. *Id.* at 5.

open-ended questioning, and may be deterred from focusing on data that do not fit on the template.<sup>55</sup>

The role of computers is central to this evolution. For example, Dr. Groopman reports that, after the Food and Drug Administration approved a computer-aided diagnostic system for use by radiologists, there was an increase in false positives.<sup>56</sup> “This demonstrates the power of technology, particularly computer-based, in shaking the confidence of a specialist in his initial diagnosis.”<sup>57</sup> “Scoring schemes are proliferating in all branches of medicine,” he says, and many young doctors “look to classification schemes and algorithms to think for them.”<sup>58</sup> There is, for example, “a fundamental schism in the field of oncology, between those who are driven almost entirely by data and those who are willing to treat patients outside of proven protocols.”<sup>59</sup>

Responding to the challenges of practicing medicine in the computer era, Dr. David Blumenthal wrote in 2007 that health information technology is “a potentially transformative force that ultimately will bring about a radical redesign of the processes by which care is delivered.”<sup>60</sup> Five years before, he wrote that the information revolution, coupled with other developments like healthcare consumerism and the rise in alternative providers of healthcare, could mean that “the medical profession might be headed, if not for extinction, at least toward a profoundly diminished role and status in ministering to society’s ills.”<sup>61</sup> But he concluded then that the medical profession “does not seem headed for extinction—like some quaint species of the era between Hippocrates and Gates.”<sup>62</sup>

In sum, the advent of the electronic doctor might produce revolutionary results in medical practice, whether for good or ill.<sup>63</sup> Although

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55. *Id.* at 99; see also Anne Armstrong-Coben, Op-Ed., *The Computer Will See You Now*, N.Y. TIMES, Mar. 6, 2009, at A27 (arguing that “the computer depersonalizes medicine”).

56. *Id.*

57. *Id.*

58. *Id.* at 238.

59. GROOPMAN *supra* note 52, at 199.

60. David Blumenthal & John P. Glaser, *Information Technology Comes to Medicine*, 356 NEW ENG. J. MED. 2527, 2527 (2007).

61. David Blumenthal, *Doctors in a Wired World: Can Professionalism Survive Connectivity?*, 80 MILBANK Q. 525, 526 (2002).

62. *Id.* at 543.

63. A different slant, not pursued here, is that medical “advances” during the last century have not produced desirable results, even though they have increased longevity in much of the world and eliminated or very substantially reduced mortality due to certain infections. This attitude is a feature of the contemporary critique of the idea of progress. For a collection of essays on this topic, see generally PROGRESS: FACT OR ILLUSION? (Leo Marx & Bruce Mazlish eds., 1996). For a very effective rebuttal of the application of this skepticism to medicine, see Leon Eisenberg, *Medicine and the Idea of Progress*, in PROGRESS: FACT OR ILLUSION?, *supra*, at 45.

it is not possible for those of us who are outside that profession to be certain about the importance of these developments in medical practice, the possible impact of the electronic doctor can at least provide a comparison to the Electronic Lawyer's impact on legal practice. And though the world of the Electronic Lawyer is pervasively affected by electronic gadgets, it does not seem presently likely to be affected in so fundamental a fashion as some doctors foresee for the electronic doctor.

### III. THE COMPUTER AS LAWYER?

We have seen that some fear that the role of the doctor will be transformed by the advent of electronic devices. Of course, dire predictions about the transformation of medical care are just predictions. But could something similar lie in lawyers' futures?

One reaction is that lawyers' work is fundamentally different from doctors' work, and therefore immune to similar technological pressures. Professor Groopman's book *How Doctors Think*<sup>64</sup> lends some support to that view. It begins with the observation that "[m]y generation [of doctors] was never explicitly taught how to think as clinicians."<sup>65</sup> From his point of view, the problem is that *now* medical students are taught differently, inclining them to take a computer-like approach to medical problems.<sup>66</sup>

Certainly the education of lawyers has not neglected the core question of how they should think about doing their jobs. To the contrary, as made famous in the 1970s book and movie *The Paper Chase*,<sup>67</sup> learning to "think like a lawyer" is a central focus of legal education. That centrality is continually recognized. There is, for example, a 2007 Oxford University Press book on the topic,<sup>68</sup> and there are myriad articles about it.<sup>69</sup> Actually, that inclination in legal education originated a century before Professor Kingsfield's famous line in *The Paper Chase*: "You come in here with a skull full of mush and you

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64. See GROOPMAN, *supra* note 52.

65. *Id.* at 4.

66. See *id.* at 5 (asserting that current-day medical students are "taught to follow preset algorithms and practice guidelines in the form of decision trees").

67. JOHN JAY OSBORN, JR., *THE PAPER CHASE* (1971); *THE PAPER CHASE* (Twentieth Century Fox 1973).

68. ELIZABETH MERTZ, *THE LANGUAGE OF LAW SCHOOL: LEARNING TO "THINK LIKE A LAWYER"* (2007).

69. See, e.g., Stephen Wizner, *Is Learning to "Think Like a Lawyer" Enough?*, 17 *YALE L. & POL'Y REV.* 583 (1998); Kurt M. Saunders & Linda Levine, *Learning to Think Like a Lawyer*, 29 *U.S.F. L. REV.* 121 (1994).

leave thinking like a lawyer.”<sup>70</sup> As Professor LaPiana has shown, Langdell’s case system might best be understood as designed to prepare law students to do what lawyers have to do in court—analyze and apply cases.<sup>71</sup> “The power of the case method to teach legal reasoning thus became its ultimate justification.”<sup>72</sup> Surely computers can’t do what lawyers do?

Actually, it’s not so clear. For one thing, the role of something like the case method is not unique to legal education. Despite Professor Groopman’s report that doctors are not taught how to think,<sup>73</sup> the case method has long existed in medical education also. President Eliot of Harvard approved of Langdell’s innovations in legal education partly because they resembled changes in the Harvard Medical School, where laboratory and clinical work was added to the curriculum—“students learned by doing what professionals did in practice.”<sup>74</sup> In 1910, clinicopathological conferences modeled on Langdell’s case method were introduced at Massachusetts General Hospital.<sup>75</sup> So medical education itself has had something analogous; if that form of clinical analysis can be performed by computers, so might legal analysis.

Perhaps more significantly, the whole notion that legal analysis is distinctive has come under fire in recent years. Some urge that reasoning by analogy is a unique feature of legal reasoning,<sup>76</sup> but others contend that there is nothing special about legal reasoning.<sup>77</sup> Trying

70. *THE PAPER CHASE* (Twentieth Century Fox 1973).

71. See WILLIAM P. LAPIANA, *LOGIC AND EXPERIENCE: THE ORIGIN OF MODERN AMERICAN LEGAL EDUCATION* 70–73, 95–108 (1994) (describing the way in which close analysis of cases became crucial for lawyers at the end of the nineteenth century, partly due to the introduction of the Field Code).

72. *Id.* at 151.

73. See GROOPMAN, *supra* note 52.

74. LAPIANA, *supra* note 71, at 26.

75. David M. Eddy & Charles H. Clanton, *The Art of Diagnosis: Solving the Clinicopathological Exercise*, in *PROFESSIONAL JUDGMENT*, *supra* note 39, at 200, 200 (reporting that clinicopathological conferences “are the offspring of the case method of teaching instituted at the Harvard Law School in the 1870s and introduced to the Massachusetts General Hospital in 1910 by Dr. Richard Cabot”).

76. See, e.g., LLOYD L. WEINREB, *LEGAL REASON: THE USE OF ANALOGY IN LEGAL ARGUMENT* (2005) (arguing that lawyers and judges use analogies, without relying on some general principle extracted from them, as grounds for deciding cases).

77. See, e.g., Richard A. Posner, *Reasoning By Analogy*, 91 *CORNELL L. REV.* 761, 768 (2006) (“Analogies are not reasons . . .”); Larry Alexander, *The Banality of Legal Reasoning*, 73 *NOTRE DAME L. REV.* 517, 517 (1997) (“[T]hinking like a lawyer is just ordinary forms of thinking clearly and well.”); Frederick Schauer & Virginia J. Wise, *Legal Positivism as Legal Information*, 82 *CORNELL L. REV.* 1080, 1082 (1996) (“[C]laims about the distinctive character of legal reasoning appear increasingly implausible—‘thinking like a lawyer’ is a phrase heard less and less these days.”).

to unravel this dispute is far beyond the goals of the current piece, but the existence of the dispute provides reason for caution about thinking legal analysis immune to poaching by computers because of its distinctive nature.

There seems nonetheless some room to argue that the most creative legal work depends on something that it would be difficult for a computer to emulate. Professor Groopman's main objection to the new orientation of medical analysis is that it does not legitimate thinking "beyond the box," which can be crucial to successfully solving some of the most difficult medical diagnostic problems.<sup>78</sup> But assuming that much sophisticated legal analysis is beyond the competence of computers<sup>79</sup> does not mean that most lawyers do that sort of thing most of the time. To the contrary, there is more reason to believe that most lawyers spend most of their time doing legal analysis that is more of the "fill in the blanks" variety. *That* sort of activity might be done with some frequency by a computer.

Richard Susskind, an English legal theorist, announced in a 2000 book that computers will soon be doing that kind of work.<sup>80</sup> Contrary to those who contend that legal reasoning is unique, he asserted that "there is nothing inherent in the process of legal reasoning or in the nature of law that constitutes a theoretical or practical obstacle to the development of rule-based expert systems in law of restricted scope."<sup>81</sup> He forecast that information and the Internet would "fundamentally, irreversibly and comprehensively change legal practice, the administration of justice and the way in which non-lawyers handle their legal and quasi-legal affairs."<sup>82</sup> In his view, "by 2015, the *main* way in which legal service is delivered across the world will be through access to online legal service as opposed to consultation with human lawyers."<sup>83</sup> Most lawyers—like travel agents—are therefore threatened with "disintermediation" because their customers will be able to make their own legal arrangements using computer-based systems without the direct involvement of human professionals.<sup>84</sup>

In this Brave New World for lawyers, then, most Americans would get their legal advice from the legal equivalent of TurboTax. Lawyers

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78. See GROOPMAN, *supra* note 52, at 5.

79. See *infra* notes 95–101 and accompanying text (discussing the difficulties of modeling American lawyers' analysis by computers).

80. See RICHARD SUSSKIND, *TRANSFORMING THE LAW: ESSAYS ON TECHNOLOGY, JUSTICE AND THE LEGAL MARKETPLACE* (2000).

81. *Id.* at 213.

82. *Id.* at viii–ix.

83. *Id.* at 29.

84. See *id.* at 45–46.

could find work for companies that design such computer programs, but (usually) not advising individual clients. At least some legal practices might be ripe for this sort of thing; family law practices or drafting wills come to mind. Recurrent situations might really be easily handled by a properly programmed computer. There have at least been suggestions that computers will threaten other learned professions.<sup>85</sup> Indeed, Milton Friedman once urged that the Federal Reserve Board be replaced by a computer.<sup>86</sup>

It need hardly be emphasized that such a change would be revolutionary. Susskind sugar coats the pill by urging that the main effect will be to provide access to (computerized) legal advice for those who cannot presently afford the human version. And in the UK there seems to be some reason to think this sort of thing could be designed. Susskind reported in 2000 that a program existed that permits a lay person to navigate Scottish divorce law without the assistance of a solicitor or barrister,<sup>87</sup> and some suggest that computers would be adapted to perform other forms of legal problem-solving.<sup>88</sup>

But the likelihood of this sort of revolution happening, or happening soon, seems remote in the U.S. For one thing, some of Susskind's predications already look inaccurate, at least for the U.S. For example, in 2000 he predicted that by 2002 clients will insist on being able to log onto a law firm's website and check the progress of work on their cases, including specifics about tasks being performed or already finished, and that any firm not offering this service will be at a disadvantage.<sup>89</sup> Although by 2009, many American firms probably have

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85. See, e.g., IAN AYRES, *SUPER CRUNCHERS* 167 (2007) (arguing that automated decision-making has supplanted bank loan officers and will do the same to other professional jobs); *Hold the Front Page*, *ECONOMIST*, Mar. 8, 2008, at 90, 90 (suggesting that computer programs could "turn editorial decisions into a rational process, rather than an intuitive one").

86. See Hillel J. Einhorn, *Accepting Error to Make Less Error*, in *PROFESSIONAL JUDGMENT*, *supra* note 39, at 181 (citing Friedman comment).

87. SUSSKIND, *supra* note 80, at 210 (describing prototype of an expert system in Scottish divorce law).

88. See, e.g., François Brochu, *The Internet's Effect on the Practice of Real Property Law: A North American Perspective*, 2003(2) *J. INFO. L. & TECH.*, [www2.warwick.ac.uk/fac/soc/law/elj/jilt/2003\\_2/brochu](http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/2003_2/brochu).

89. See SUSSKIND, *supra* note 80, at 19–20. The author identifies eight categories of "first generation" client relationship systems:

1. *Status tracking systems.* These enable clients to monitor the status of any matter being conducted on their behalf so that they can determine, for example, what the latest activity has been, on whom the next responsibility falls, or the basic milestones and deadlines for the matter in question.
2. *Financial reporting systems.* These offer clients the facility to find out, in respect of any particular matter, how much time has been recorded, what bills have been rendered so far, the level of outstanding work in progress, the charge-out rates being applied, and other related financial information.

some services along the lines Susskind envisioned for 2002,<sup>90</sup> these stop far short of supplanting the lawyer herself with a computer, and it seems likely that developments along that front have not proceeded at the pace he predicted.<sup>91</sup>

Perhaps more significantly, there remains a legitimate question about the extent to which computers *can* be programmed to perform the sort of analysis that good lawyers provide to clients. To take the TurboTax analogy, it is clear that some of these legal materials have come into existence.<sup>92</sup> And there surely seems to be a market for these materials, given the striking rise in *pro se* litigation in recent years. Thus, we are told that “myriad websites devoted to *pro se* litigation now exist and are accessible to anyone possessing Internet access and the ability to perform a simple search engine query.”<sup>93</sup> At the same time, we are also warned that “the growing availability of

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3. *Contact systems.* So that clients are able to determine the identities, qualifications, and experience of lawyers working on any particular matter, these systems make that information easily available, alongside the ability to search for suitable practitioners for particular classes of work.

4. *Virtual deal rooms and other virtual case rooms.* These are online, secure sites for the posting and accessing of documents pertaining to any particular deal or dispute.

5. *Online archives.* Developed for particular clients, these provide an online collection of all advice, documents, agreements, and other work produced for that client, held in one indexed and easily accessible repository.

6. *Online instruction.* This is a facility to enable law firms to be invited to begin work on new matters without cumbersome, face-to-face procedures or exchanges of formal letters.

7. *Case/matter management services.* A form of project management facility, and often embracing many of the above categories of client relationship system, these enable clients to monitor the flow of individual matters or to assess the collective workload being undertaken by a particular firm.

8. *Client relationship sites.* These are online sites dedicated to the particular relationship between one client and one law firm, being a first port of call for the client wanting access to any of the firm's services.

*Id.*

90. See *infra* notes 125–131 and accompanying text (describing services offered by some American law firms in 2007).

91. For further discussion of the electronic law office, involving services like those listed by Susskind in note 89, see *infra* notes 108–135 and accompanying text.

92. See, e.g., Christine Larson, *A Need for a Will? Often, There's an Online Way*, N.Y. TIMES, Oct. 14, 2007, at 8. Larson describes a service offered by LegalZoom, which offers will-drafting online for a charge of about \$70. *Id.* But this service relies on a LegalZoom employee (not a lawyer) who reviews answers to questions the customer provides online and develops a will based on those answers. *Id.* The article also points out that WillMaker Plus, a program from Nolo Press, experienced an increase of nearly thirty-three percent in sales from 2005 to 2006. *Id.* It also refers to Suze Orman's Will and Trust Kit, which reportedly costs \$17.99. *Id.*

93. Nina Ingwer VanWormer, Note, *Help at Your Fingertips: A Twenty-First Century Response to the Pro Se Phenomenon*, 60 VAND. L. REV. 983, 1007 (2007).



Internet resources can raise important concerns over accuracy and relevance due to the medium's inherent openness."<sup>94</sup>

The diversity of state and local laws, as well as the variety of federal laws and regulations, that must often be considered in the U.S. would make the task of designing a program that reliably could substitute for a knowledgeable lawyer much more difficult than in other countries.<sup>95</sup>

Indeed, it seems that—as currently used by lawyers—computers play a very different role from the one they play in the diagnostic and treatment activities of doctors. For doctors, computers and other electronic devices may provide insights and information that they cannot obtain another way. Thus, the X-ray, CAT scan, and other techniques permit doctors to discern the patient's condition in a way that they could not without the electronic devices. Moreover, electronic devices—including robots that perform surgery—permit doctors to provide treatment in a way, or with a degree of accuracy, that they could not provide without the devices. Some might argue that computers could provide *better* treatment than human doctors.

It does not seem that anyone is arguing that computers can provide *better* legal advice than lawyers, only cheaper advice. Indeed, the nature of computerized support for lawyers seems qualitatively different from that used by doctors. Computerized legal research, for example, is a faster method of locating possibly pertinent legal materials. But the computer is not in a position to assess the importance of the fruits of that research. To the contrary, the very sorts of argument-development skills that the Langdellian method of instruction imparts to lawyers are still needed to construct the legal arguments that the research can be used to support. So, much as computers and other electronic devices have had and will continue to have a major impact on the operation of American law offices,<sup>96</sup> it presently does not seem that they are likely to provide a better substitute for the work of human lawyers.

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94. *Id.* at 1009; see also Terry Carter, *Who's Putting a Price on Free Legal Aid*, A.B.A. J., Sept. 2008, at 32 (describing cybersquatters who divert poor seekers of free legal advice to look-alike sites that charge for advice).

95. This point reappears in relation to the balkanized regulation of American lawyers, for they must increasingly consider the laws of multiple jurisdictions. See *infra* notes 149–175 and accompanying text. The point there is that lawyers nowadays need to be able to analyze the handling of legal issues under the law of several jurisdictions. The point here is similar—that the range of pertinent legal regimes now worth considering complicates the lawyer's task and also the job of designing a computer program that would substitute for a lawyer doing that task.

96. See *infra* notes 108–135 and accompanying text for further discussion of the electronic law office.

The very nature of American adjudication could further complicate the effort of using computers to devise legal arguments. In many countries that rely on detailed codes, it is said that judges have limited latitude for making decisions, and that they ordinarily must apply the code rather automatically.<sup>97</sup> The role of American judges is quite different. They often have some latitude to make decisions based on the circumstances of the particular case—doing “justice”—without slavish application of some statutory or regulatory directive.<sup>98</sup> And they do so in a somewhat intuitive way that could prove highly difficult to emulate in a computer. A recent study of American judges’ actual decisionmaking found that “judges are predominantly intuitive decision makers,”<sup>99</sup> but urged that they move toward what the authors called an “intuitive override” model, in which judicial first impressions are reexamined by deliberation. The authors supported this argument with examples from medical decisionmaking<sup>100</sup> and closed with a quotation from Professor Groopman’s study of how doctors think.<sup>101</sup> Whether American judges will move further toward such a model remains to be seen, but the study underscores the difficulty of modeling some legal issues for resolution by a computer.

Looking into the future, and considering the notion that the capacity of computers tends to increase geometrically, it may be that breakthroughs in computing capacity will at some point permit computers

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97. See, e.g., CARL F. GOODMAN, *THE RULE OF LAW IN JAPAN: A COMPARATIVE ANALYSIS* (2003). Goodman explains that the common-law process of lawmaking “may be viewed as a ‘bottoms up’ system where the law is created (or ‘found’) as a consequence of lawsuits brought by individuals.” *Id.* at 7. Goodman adds:

Unlike the common law system, the civil law system that was developed on the continent of Europe was a system based on an entirely different philosophy. Here was no “bottoms up” system but rather a “top down” system of law making. The “top down” model of lawmaking has a long and honorable tradition. . . . Under the civil law system’s top down model judges were neither as important nor as influential as judges in the common law system.

*Id.* at 8; see also ROBERT A. KAGAN, *ADVERSARIAL LEGALISM: THE AMERICAN WAY OF LAW* 11 (2001) (contrasting American courts with German and French courts, “where bureaucratically recruited and embedded judges—not the parties’ lawyers and not lay juries—dominate both the evidence-gathering and the decisionmaking processes”).

98. According to Kagan:

Compared to most national judiciaries, American judges are less constrained by legal formalisms; they are more policy-oriented, more attentive to the equities (and inequities) of the particular situation. In the decentralized American legal system, if one judge closes the door on a novel legal argument, claimants can often find a more receptive judge in another court.

KAGAN, *supra* note 97, at 16.

99. Chris Guthrie, Jeffrey J. Rachlinski & Andrew J. Wistrich, *Blinking on the Bench: How Judges Decide Cases*, 93 CORNELL L. REV. 1, 5 (2007).

100. See *id.* at 33 (using a doctor’s diagnosis as an example).

101. See *id.* at 43 (quoting GROOPMAN, *supra* note 52, at 9).

to do something like the analysis of client problems that lawyers do. Even if that proves true, it seems unlikely that computers will also be able to bring creativity to this process; for at least high-end transactions, therefore, human help is likely to remain crucial. Indeed, Susskind recognizes that for such high-end, high-value work, individually tailored legal work will remain the norm, but he sees computers displacing “the standard and repetitive work of our current lawyers.”<sup>102</sup>

For clients needing such standardized legal work, this may be a liberation. Many are presently priced out of the American legal market—hence the growing presence of *pro se* litigants—and it is possible that such breakthroughs will not divert much current legal work from actual lawyers because those who use the legal TurboTax programs of the future already have foresworn lawyers. Nonetheless, there may be considerable fights about unauthorized practice of law if computerized services providing legal advice become more prevalent.<sup>103</sup> For example, Nolo Press, a California concern that produces hard-copy books that assist lay people in handling their own legal problems, got into trouble about unauthorized practice in Texas.<sup>104</sup>

Susskind predicts that lawyers’ monopoly on the provision of legal services will be shattered by the computer,<sup>105</sup> but that has not yet happened. Noting that most state statutes are somewhat vague on what constitutes the practice of law, Professor Hadfield foresees ongoing difficulties for computer-based products:

Consider even a basic consumer product such as the standard-form simple wills, originally in hard-copy books and now packaged in software and online, delivered by entities such as Nolo Press. State bar associations challenged the sale of these products in their state as unauthorized practice of law (UPL). Even though many states have exempted such products from the UPL restrictions, it is a state-by-state process, and the standards vary from state to state. Moreover, in order to stay on the right side of the UPL restrictions and state bar associations, Nolo Press products and similar products must be generic and not intended to tailor solutions to the unique “circumstances or objectives of another person.” More elaborate products that use, for example, artificial intelligence mechanisms to

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102. SUSSKIND, *supra* note 80, at 113.

103. Other and different issues about the impact of technology on authorization to practice law are considered in notes 149–175 and accompanying text.

104. See *In re Nolo Press*, 991 S.W.2d 768 (Tex. 1999) (addressing a dispute arising out of the proceedings by the Texas Unauthorized Practice of Law Committee to investigate the activities of Nolo Press). Nolo Press sought a jury trial on whether it had engaged in the practice of law, but just as the case was going to trial the Texas legislature amended the state’s unauthorized practice statute to exempt books and software. Kathy M. Kristof, *Legal Champion for the Middle Class*, L.A. TIMES, Nov. 18, 2007, at C3.

105. See SUSSKIND, *supra* note 80, at 98–99.

tailor documents or route nonstandard issues into online advisory services or “chat with a lawyer now!” mechanisms are presumably beyond the pale.<sup>106</sup>

At least some examples of such UPL restrictions on computer-based legal assistance can be found.<sup>107</sup>

For the present, then, the computer as lawyer is surely a thing of the distant future, even if the computer as doctor may come to be a current reality sooner and more frequently.

#### IV. THE ELECTRONIC LAW OFFICE

Although the American lawyer may not herself have been supplanted by a computer, her office is hugely dependent on computers for myriad everyday activities from billing to communications to legal research. As noted above, Susskind foresees more aggressive involvement of computers in everyday law firm activities.<sup>108</sup> Even if his forecasts have not yet come true, it is undoubtedly true that computers have affected legal practice in a wide variety of ways.

It also seems that there has been a revolution in practice—particularly of large commercial law firms—in the last generation or so.<sup>109</sup> Since 1970, American law firms have become less and less stable. Law firm partners once retained their firm affiliations for their entire careers, but now laterals frequently shift from firm to firm. Corporate clients once established long-term relationships with given law firms but now play the field, often assigning work on the basis of “beauty contests” consisting of competing presentations by various law firms for specific projects. Law firms have been merging with increasing frequency, creating multi-city (and sometimes multi-national) behemoths with hundreds (and sometimes thousands) of lawyers. Individ-

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106. Gillian K. Hadfield, *Legal Barriers to Innovation: The Growing Economic Cost of Professional Control over Corporate Legal Markets*, 60 STAN. L. REV. 1689, 1724 (2008).

107. See, e.g., *In re Reynoso*, 477 F.3d 1117 (9th Cir. 2007) (upholding an injunction against a company that maintained websites that helped customers prepare bankruptcy petitions and schedules). In *Reynoso*, the court found that the program offered more than mere clerical assistance since it did more than simply insert responses into fields on a form. *Id.* at 1125. The program “determined where (particularly, in which schedule) to place information provided by the debtor, selected exemptions for the debtor and supplied relevant legal citations.” *Id.* Accordingly, although it “express[ed] no view as to whether software alone, or other types of programs, would constitute the practice of law,” the court concluded that the guidance provided by this particular program did constitute practice of law. *Id.* at 1126 n.9. See also Richard F. Mallen & Assocs., Ltd. v. Myinjuryclaim.com Corp., 769 N.E.2d 74 (Ill. App. Ct. 2002) (upholding standing of personal injury lawyers to sue company that provided settlement estimates to people injured in car accidents).

108. See SUSSKIND, *supra* note 80; *supra* note 89 and accompanying text (listing functions that could be provided to clients on a routine basis).

109. For further discussion of these issues, see generally Marcus, *supra* note 10.

ual “partners” no longer enjoy the level of participation or the degree of control they once did, which feeds the tendency of successful lawyers to shop for a better deal with other firms. For at least some lawyers, this regime has produced fabulous financial rewards.

We began by recognizing that technology—the telephone—played an important role in the emergence of those law firms.<sup>110</sup> Technology—enabling varying versions of the Electronic Lawyer—has undoubtedly played a role in the recent changes in law firms. A multinational law firm relies on electronic communications to facilitate its worldwide activities, including virtual “partnership meetings.” The Internet has become a marketing tool. A decade ago, it was a big new thing for a law firm website to attract attention.<sup>111</sup> Now websites are clearly designed to impress potential clients and provide them with marketers’ information. Firms also use the Internet to attract associates with videos and other postings that convey a “fun” image of the firms.<sup>112</sup>

Technology can affect the actual organization of law firms. E-Discovery—responding to discovery requests for electronically stored information—may be fostering the creation of a new layer of lawyer-employees at law firms. Traditionally, the law firm ladder has been fairly clear. The firm hires associates, and either they become partners or leave the firm. This “up or out” approach has been softened with expanded use of “of counsel” or “senior associate” positions, but the essentially tenure-track aspect of initial hiring has not changed. The burden of E-Discovery, however, is prompting some firms to experiment with a new niche of permanent staff attorneys who specialize in this activity.<sup>113</sup> Using staff attorneys could mean lower bills for cli-

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110. See *supra* note 7 and accompanying text (quoting Galanter & Palay).

111. Thus, the San Francisco Recorder ran a story in 1997 reporting that the Orrick law firm was experiencing 5000 hits a week on its website. See *This Week in Recorder History*, S.F. RECORDER, July 9, 2007, at 5.

112. See, e.g., Karen Donovan, *Law Firms Go a Bit Hollywood to Recruit the YouTube Generation*, N.Y. TIMES, Sept. 28, 2007, at C6 (reporting that law firms are creating websites “with the look and feel of YouTube” to persuade law students that the firms “are young-thinking and hip”); Sheri Qualters, *Law Firms Post Online Video Clips to Attract Associates*, S.F. RECORDER, Jan. 23, 2007, at 3 (reporting that Web videos featuring only associates, conceived as a marketing project for clients, are now perceived as a valuable recruiting tool to reach law students as well).

113. See Jill Redhage, *Enlisting Staff Attorneys to Tame Discovery Fees*, S.F. DAILY J., June 23, 2008, at 1 (reporting that the growing burdens of E-Discovery meant that “the work stopped being well received among partnership-track associates” at Bingham McCutchen, and prompted the firm to develop an in-house staff attorney program to do this work, using lawyers who are not on the partnership track); Kellie Schmidt, *Firm to Fill Cheap Seats*, S.F. RECORDER, Nov. 1, 2007, at 1 (reporting that Chicago firm McDermott, Will & Emery responded to the dramatically escalating costs of E-Discovery by creating a new position of staff attorney to deal with this work).

ents because the billing rates of these lawyers are lower than the rates charged for partnership-track lawyers.<sup>114</sup> Some suggest that lawyers in the new positions will be happier than associates in traditional tenure-track positions.<sup>115</sup> Whatever the likelihood of that result, the central point is that a significant feature of the conventional law firm arrangement—the “up or out” expectations for young lawyers—may be abandoned due to the demands of technological change.

The operation of the law firm may be altered in other significant ways. In 2002, the San Francisco law firm Orrick shifted a great deal of its “back office” work from San Francisco to Wheeling, West Virginia.<sup>116</sup> It estimates that this move saved the firm \$26.5 million during the first five years of the West Virginia office’s operations.<sup>117</sup> Since then, “offshoring” of such work has grown. Howrey has opened an office in India,<sup>118</sup> as has Clifford Chance.<sup>119</sup> Baker & McKenzie has moved its back office work to the Philippines.<sup>120</sup> Moreover, Indian firms employing Indian lawyers are increasingly providing low-cost services for American law firms or clients, moving beyond providing purely back office services. One estimate is that the number of Indian lawyers engaged in this activity increased threefold between 2005 and 2006.<sup>121</sup> Another estimate is that the dollar value of this activity might rise approximately fiftyfold to four billion dollars by 2015.<sup>122</sup> Although some law firms resist such offshoring as undermining the professional atmosphere of American law firms,<sup>123</sup> client pressures may mean that the frequency of such arrangements rises. Thus, a recent article begins with the illustration of a corporate general

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114. See, e.g., Redhage, *supra* note 113 (reporting that salaries and billing rates for staff attorneys are lower than for partnership-track associates).

115. See *id.* (reporting that the director of the Bingham McCutchen staff attorney program says that “staff attorneys escape the stress of the partnership track and enjoy . . . a less competitive work environment with more camaraderie”).

116. Kellie Schmitt, *The View From Wheeling*, S.F. RECORDER, May 5, 2008, at 1.

117. *Id.*

118. Daphne Eviatar, *Howrey Opens India Office for Document Management*, S.F. RECORDER, Feb. 11, 2008, at 3.

119. Richard Lloyd, *Home Away From Home*, AM. LAW., Sept. 2007, at 75.

120. Zusha Elinson, *Orrick Spins the Globe*, S.F. RECORDER, May 23, 2007, at 1.

121. Aruna Viswanatha, *Inside Out*, AM. LAW., Mar. 2008, at 20 (reporting an estimate that from March 2005 to the end of 2006, the number of Indian lawyers so employed rose from 1800 to 6000); see also Niraj Sheth & Nathan Koppel, *With Times Tight, Even Lawyers Get Outsourced*, WALL ST. J., Nov. 26, 2008, at B1 (reporting rapid growth in outsourcing to India).

122. See Vesna Jaksic, *Guidelines for Outsourcing Grow*, NAT’L L.J., Apr. 30, 2007, at 5; Arin Greenwood, *Manhattan Work at Mumbai Prices*, A.B.A. J., Oct. 2007, at 36, 39.

123. See Elinson, *supra* note 120 (quoting the chair of a large American law firm, who stated that “[w]e depend very heavily on personal relationships between lawyers and staff and it would be a very substantial change and disruption if we told people you either don’t have a job or you can move to wherever”).

counsel asking himself, "Why pay big-firm associates \$200 an hour to do document review when you can ship it out to India for \$25 an hour?"<sup>124</sup> Answering that question will likely become a bigger concern of American law firms.

Closer to home, law firms are beginning to offer the kinds of electronically assisted access opportunities that Susskind predicted.<sup>125</sup> American firms have been using computers for multiple tasks for some time. More than twenty years ago, the *American Bar Association Journal* was already reporting that "legal computing is no longer just for cutting and pasting standard forms, but for building cases, administering estates, creating personal research libraries, and much more."<sup>126</sup> In 2007, some twenty-four percent of firms were giving in-house lawyers at corporate clients access to the law firm's knowledge management systems.<sup>127</sup> Corporate clients are now requesting specific technological arrangements from law firms, such as electronic billing and access to their case materials via the firm's extranet, and twenty percent of those potential clients said that access of this sort affected decisions whether to retain a specific law firm.<sup>128</sup> E-billing is a high priority; "[e]lectronic invoices are typically broken down into exquisite detail, so company lawyers and CFOs can see exactly how a case was staffed, what the firm charged for late-night takeout dinners for the paralegals, and whether the amount billed falls within the budgeted range."<sup>129</sup> This scrutiny can even be used to confirm that staffing complies with the client's diversity goals.<sup>130</sup> For example, we are told that in mid-2008 "Wal-Mart, a leading corporate advocate of diversity in the legal profession, is deploying new software to keep a watchful eye on its law firms and make sure the attorneys working on its matters are diverse."<sup>131</sup>

For the firm's attorneys themselves, offsite access is becoming total:

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124. Zusha Elinson, *GCs Embracing Outsourced Work*, S.F. RECORDER, Jan. 24, 2008, at 1.

125. See SUSSKIND, *supra* note 80; *supra* note 89 and accompanying text (listing potential services).

126. Robert L. Perry, *The Case for Computers in the Law Office*, A.B.A. J., June 1, 1987, at A9.

127. Anthony Paonita, *All Aboard*, AM. LAW., Mar. 2007, at 77.

128. *Id.*

129. *Id.* at 78.

130. *Id.* (quoting Pitney Bowes's manager of legal operations as explaining that E-billing data enables the corporation to confirm that law firms are actually using diverse teams on its legal matters).

131. Alana Roberts, *A Tug of War*, MIAMI DAILY BUS. REV., July 11, 2008, at A1. The article adds that "[t]he new software is an example of the evolving approach taken by general counsel to ensure more minorities and more women are staffing their outside legal assignments." *Id.*; see also Leigh Jones, *Microsoft to Offer Counsel Diversity Bonuses*, NAT'L L.J., July 21, 2008, at 4 (reporting on Microsoft "tracking plan" to achieve these diversity goals).

Firms are thinking not just about remote access, but also about universal access as well. It is not enough that attorneys are able to communicate around the clock; they now want complete and fully secure office capabilities. This way, they can respond to conflict checks, download client reports, and complete time reports anytime, anywhere.<sup>132</sup>

Together, these changes surely mean that the Electronic Lawyer operates in an environment significantly different from the one her predecessors experienced in earlier decades. One consequence has been noted already—the stress on the work-life balance.<sup>133</sup> When the cares and burdens of the office could largely be left behind at the office, these concerns were not so pressing. But now that being at the office is hardly integral to being “at work,” the potential exists for work to intrude into every waking moment, and perhaps some sleeping ones as well. As those who renamed BlackBerries “CrackBerries” recognize, technology can produce qualitative changes in life for professionals. The increased access afforded clients is likely to magnify this effect, enabling them to monitor lawyers’ activities minutely and continuously, and prompting them to demand responses on shorter turn-around times. *Michael Clayton* illustrates this effect vividly; the title character seems to be constantly on call, and required to head out at a moment’s notice no matter what the time of day or night. Many contemporary lawyers feel somewhat the same way.

Indeed, Professors Galanter and Henderson have recently emphasized the role of electronic media in the transformation of the big law firm:

[T]he advent of the computer and sophisticated software has profoundly influenced the behavior of the market participants. Increasingly, the financial performance of a firm is tracked internally on an office-by-office, practice-group-by-practice-group, lawyer-by-lawyer level. . . . With the interconnectivity of business over the Internet, a large proportion of clients are demanding that law firms submit their bills electronically using a standardized format that facilitates firm-to-firm comparisons on similar matters. Thus, from virtually every perspective, the economic contribution of specific lawyers or law firms has become more measurable and transparent.<sup>134</sup>

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132. See, e.g., Marcy Burstin, *Making It Better*, AM. LAW., Nov. 2006, at 55.

133. See *supra* note 25 and accompanying text.

134. Marc Galanter & William Henderson, *The Elastic Tournament: A Second Transformation of the Big Law Firm*, 60 STAN. L. REV. 1867, 1897–98 (2008). Galanter and Henderson note:

From the emergence of the promotion-to-partnership firm until about 1960, the office, research, and communication technology of law practice remained largely unchanged. Then, in rapid succession, the firm’s productivity, scope, and scale were enlarged by



As we shall see,<sup>135</sup> the electronic effect may not be causative, but it is nonetheless central.

Looking to the future, then, one would expect more of the same; for many attorneys, the stresses of practicing law are not likely to abate due to technology. Coping with these stresses will likely be a major concern for the bar over coming decades.

## V. A TWO-TIER PROFESSION?

Another possible feature of the future—potentially exacerbating other stresses on the profession—is that it may become a two-tier legal affair. Competitive forces, we are told, may increasingly limit top-dollar legal work to a small number of law firms, leaving the others to scarp for the less exalted work in a highly competitive environment leavened by the possibility of budget offshore placement of legal work formerly given to American lawyers.<sup>136</sup> It seems that the concentration of success at the very top, recognized more generally a decade ago,<sup>137</sup> may become the lot of the legal profession.

There is certainly some evidence that this phenomenon is taking hold in the legal profession. The distribution of starting salaries for recent law graduates, for example, does not form a Bell curve, but rather shows two distinct peaks, with the high-earning young lawyers making far more than the rest.<sup>138</sup> Fifteen years ago Galanter and Pa-

photocopying, computers, jet air travel, faxing, the Internet, and the myriad innovations that accompanied them.

*Id.* at 1881.

135. See *infra* notes 239–270 and accompanying text.

136. See, e.g., Mehul Patel, *Ecosystem of Legal Services Is Evolving*, NAT'L L.J., Apr. 28, 2008, at S1. Patel, who is executive vice president of a “new model firm that changes the way attorneys and clients work together,” explains as follows:

For a handful of the most successful traditional law firms, this environment brings an opportunity to adapt, differentiate, and garner the premium price-insensitive bet-the-company work that will drive growth in profits per equity partner. For most others, it will mean a new era of competition, both with other traditional firms and with a new category of firms that will enter the market in response to the needs of corporate buyers.

*Id.*

137. See ROBERT H. FRANK & PHILIP J. COOK, *THE WINNER-TAKE-ALL SOCIETY: WHY THE FEW AT THE TOP GET SO MUCH MORE THAN THE REST OF US* (1995) (examining the tendency of concentration of economic activity to magnify the take of the “winners” but not of the rest).

138. For the law school class of 2006, the National Association of Law Placement (NALP) compiled data about the distribution of full-time salaries, which revealed a bimodal distribution, with one peak at about \$35,000 per year and another at about \$135,000 per year. See NALP, *A Picture Worth 1,000 Words* (Sept. 2007), <http://www.nalp.org/content/apictureworth1000words>. For graduates of the class of 2007, NALP compiled similar data, yielding a chart again with two high points, one at a salary of about \$40,000 and another at a salary of about \$160,000. See NALP, *Another Picture Worth 1,000 Words* (July 2008), <http://www.nalp.org/anotherpicture>. A

lay began their book on law practice with a similar orientation, seeking to examine “the two hemispheres of the profession.”<sup>139</sup> The 2005 study of the Chicago bar by Professor Heintz and his colleagues found such a divergence comparing a study of the Chicago bar in the mid-1970s. The American Bar Association, for example, included more graduates of elite law schools and attorneys from big firms than others.<sup>140</sup> This divergence has happened even though law firms have become more diverse in many ways.<sup>141</sup> A small number of elite law schools increasingly send their graduates to large law firms than do other law schools.<sup>142</sup> For 2008, however, the level of hiring reached such a point that some predicted that fully a quarter of all law school graduates would be hired by big firms, which would seem to spread the opportunities to graduates of a larger collection of law schools.<sup>143</sup> But the reportedly growing divergence in incomes between the largest law firms and moderate-sized firms may mean that for partners the difference becomes more and more pronounced.<sup>144</sup>

For those who favor a unified bar, these prospects are troubling. The advent of the Electronic Lawyer could exacerbate the divergence. A 2002 study in England found a divide between small and large firms in their use of information technology.<sup>145</sup> But generally the costs of technology are relatively low, and with the Electronic Lawyer, a small firm may be better able to compete with the big firm than without

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similar analysis of the salaries upon graduation of the members of the classes of 1991 and 1996 looked quite different, with only one high point at around \$28,000 (in 1991) and \$33,000 (in 1996). By the class of 2000, however, the trend observed in 2007 and 2008 had begun to emerge, with one high point at about \$35,000 and another at about \$125,000. See NALP, *Salaries for New Lawyers: How Did We Get Here?*, NALP BULLETIN, Jan. 2008, available at <http://www.nalp.org/content/index.php?pid=561>.

139. GALANTER & PALAY, *supra* note 7, at 1. Professor Galanter’s more recent study of big law firms suggests that stratification may emerge even among big firms. See Galanter & Henderson, *supra* note 134, at 1882–1906. In the 1920s, one study concluded that “there were two American bars which practiced two very different kinds of law, and the divisions ran along economic and class lines.” LAPIANA, *supra* note 71, at 163.

140. JOHN P. HEINZ ET AL., *URBAN LAWYERS: THE NEW SOCIAL STRUCTURE OF THE BAR* 55 (2005).

141. See *id.* at 69–71, 288–95 (noting that large law firms had become much more diverse in terms of ethnicity, race, and gender, but that the stratification among them had also become more pronounced).

142. See Leigh Jones, *Survey: More Top Grads at Nation’s Largest Firms*, S.F. RECORDER, Apr. 15, 2008, at 3 (reporting that a “bigger percentage of students graduating from top law schools in 2007 took jobs” at the 250 largest law firms in the nation than in 2006).

143. Aric Press, *The New Reality*, AM. LAW., Aug. 2007, at 91.

144. See HEINZ ET AL., *supra* note 140, at 291 (reporting that the incomes at the largest law firms grew during the period from the 1970s to 1990s, but that the incomes fell at small firms).

145. Gurmark Singh et al., *An Empirical Study of the Use of IT by Small and Large Legal Firms in the UK*, 2002(1) J. INFO. L. & TECH., [http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/2002\\_1/singh](http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/2002_1/singh).

high-tech assistance. That's the possibility foreseen by Bob Stein, former Executive Director of the ABA, who asked in 2006: "Will the new technologies level the playing field so that solo and small firm practitioners will have the same practice resources presently available primarily in large firm settings?"<sup>146</sup> Heinz and his colleagues found that technology held this promise: "Although access to electronic communication technology is now essential to an efficient and effective law practice, that technology is not so expensive that large numbers of lawyers must share it in order to make it a sensible investment."<sup>147</sup> Even if the continued stratification of the profession proves to be an ongoing reality, it does not seem that the technological aspects of practice contribute to it in this country.<sup>148</sup>

## VI. MOVING AWAY FROM BALKANIZED REGULATION?

There has been no shortage of complaints about lawyer regulation in recent decades. As Professor Hadfield put it in her recent study of the subject, "[f]ew commentators, outside of the practicing bar and the judiciary, find much to recommend the modern system of professional regulation of lawyers."<sup>149</sup> Whether or not reliance on professional self-regulation is overthrown, the advent of the Electronic Lawyer places heavy stress on the localized and balkanized nature of that regulation.

Since we began by comparing the impact of electronic devices on doctors,<sup>150</sup> it might be worthwhile to contrast the licensure practices for them. State-by-state standards for doctors would seem anomalous given that humans are essentially the same everywhere, although presumably there could be some differences in medical needs in different climates. For doctors, licensure results from a rigorous long-term se-

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146. Robert A. Stein, *The Future of the Legal Profession*, 91 MINN. L. REV. 1, 9 (2006).

147. HEINZ ET AL., *supra* note 140, at 285.

148. A number of studies support this conclusion. Thus, it is said that new technologies permit small firms and solo practitioners to better compete with large firms. See, e.g., Susanne Brent, *The New Technological Law Practice*, ARIZ. ATT'Y, June 2001, at 20, 25 (observing that technology may tip the balance in favor of a small firm); Ellen E. Deason, *Allerton House Conference '98: Confronting and Embracing Changes in the Practice of Law*, 86 ILL. B.J. 628, 633 (1998) (noting that small firms may be more nimble in adapting to rapid technological change); Neil Pederson, *Staying Competitive for the Solo and Small Firm: The Paperless Law Office*, ORANGE COUNTY LAW, July 2008, at 18, 18 (reporting on the equalizing effect of technology in overcoming the tendency of large firms to try to overwhelm small firms with paperwork); *Deliberations of the ABA Committee on Research About the Future of the Legal Profession: Part II: Access to Legal Services*, ME. B.J., Winter 2002, at 48, 54 (2002) (noting that technology permits solo practitioners to be admitted to and maintain virtual offices in multiple jurisdictions).

149. Hadfield, *supra* note 106, at 1690.

150. See *supra* notes 18–63 and accompanying text.

ries of examinations and, although it is offered by states, those who complete the examinations are eligible to practice in any state.<sup>151</sup> But even for doctors, complete portability is not assured; states may limit their movement.<sup>152</sup>

The United States certainly has a stronger tradition of localism than many countries, perhaps explaining this enduring localism in licensing doctors. That localism is surely reflected in the regulation of the legal profession, which remains a state-by-state affair. When that technique emerged, of course, it made perfect sense; a lawyer in one state would rarely engage in activities in another state that could be called legal representation there. Moreover, except for the distracting possibility under *Erie*<sup>153</sup> that a federal court in a state would apply “general” common law rather than the state’s law, lawyers rarely had to worry about the content of the laws of other states. And despite the brooding omniscience of the “general” common law, by the late nineteenth century, state laws differed on many things.

But that early nineteenth-century simplicity for legal practice must have slipped away by the end of that century, and at the beginning of the next century the introduction of the telephone further tied the nation together and meant that lawyers could not always comfortably limit their attention to the law of their own states.<sup>154</sup> Nonetheless, the state-centric mode of regulation has endured. Efforts to establish Federal Rules of Attorney Conduct for lawyers in the federal courts

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151. See, e.g., Jayne W. Barnard & Mark Greenspan, *Incremental Bar Admissions: Lessons From the Medical Profession*, 53 J. LEGAL EDUC. 340, 342–48 (2003) (describing the process of licensure for American doctors).

152. Barnard and Greenspan explain:

Portability becomes more difficult as the doctor progresses through her career. For example, some states limit a candidate’s right to licensure by endorsement (the term used to describe a transfer of license from state to state) to a defined number of years after initial licensure. After that period, an additional written qualifying exam, known as the Special Purpose Examination or SPEX, may be required.

See *id.* at 348.

153. *Erie R.R. v. Tompkins*, 304 U.S. 64 (1938).

154. See, e.g., SEAN WILLIAMS & DAVID NERSESSIAN, OVERVIEW OF PROFESSIONAL SERVICES INDUSTRY AND THE LEGAL PROFESSION 11, available at [http://www.law.harvard.edu/programs/plp/pdf/Industry\\_Report\\_2007.pdf](http://www.law.harvard.edu/programs/plp/pdf/Industry_Report_2007.pdf) (last visited Feb. 16, 2009). According to Williams and Nersessian:

This state-by-state licensing scheme was adequate at one time because most legal work was local. Today, however, it is common for lawyers to represent individuals and corporations with business dealings in multiple states. Unfortunately, the regulation of legal practice at the state level has failed to develop in tandem with business realities. This often creates impediments to the efficient delivery of legal services.

*Id.*

bore little fruit.<sup>155</sup> The question whether lawyers admitted in one state can provide legal services in another is slightly different. Many states will grant admission to attorneys admitted in other states on a reciprocity basis, but some—notably California and Florida—will not. There is surely a temptation to regard the requirement of local admission to practice as protection for local lawyers.<sup>156</sup>

That localism became harder and harder to justify through the twentieth century.<sup>157</sup> Particularly in the last third of that century, it saw the emergence of firms with multiple offices, often in many states, and the growth of international practices. To illustrate, the head of the real estate practice in the Los Angeles firm Paul Hastings recently moved to London after practicing for more than twenty years in Los

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155. For general discussion of the experience in adopting uniform rules of attorney conduct for federal courts, see ADMINISTRATIVE OFFICE OF THE UNITED STATES COURTS, WORKING PAPERS OF THE COMMITTEE ON RULES OF PRACTICE AND PROCEDURE: SPECIAL STUDIES OF FEDERAL RULES GOVERNING ATTORNEY CONDUCT (Sept. 1997), available at <http://www.uscourts.gov/rules/WorkingPapers-AttorneyConduct.pdf>. Some commentators strongly urged adoption of such rules. See, e.g., Linda S. Mullenix, *Multiforum Federal Practice: Ethics and Erie*, 9 GEO. J. LEGAL ETHICS 89, 126–27 (1995) (discussing the difficulty that attorneys confront in ascertaining the appropriate standards of professional conduct); Fred C. Zacharias, *Federalizing Legal Ethics*, 73 TEX. L. REV. 335, 379–80 (1994) (discussing the growing need for federal codification of professional standards due to the increasing nationalization of legal practice). But see Note, *Uniform Federal Rules of Attorney Conduct: A Flawed Proposal*, 111 HARV. L. REV. 2063 (1998) (arguing against adoption of proposed uniform rules). Professor Kaufman has concluded that localism should triumph over national rules, so that federal courts should adhere to the professional responsibility rules of the states in which they sit (“vertical” uniformity) rather than ensuring that all lawyers in federal court nationwide operate under the same set of rules (“horizontal” uniformity). Andrew L. Kaufman, *Who Should Make the Rules Governing Conduct of Lawyers in Federal Matters*, 75 TUL. L. REV. 149, 160 (2000). Kaufman explains:

For me, the long-term solution begins with my instinct, which has no empirically proven basis, that there are many more private lawyers who practice in both the federal and state systems in their states than who practice in the federal system in many different states. If that is the case, then it seems that the better solution to the local federal rule problem begins with vertical uniformity between the federal and state courts in a given jurisdiction . . . .

*Id.*

156. One explanation for the refusal of California and Florida to afford reciprocity to experienced lawyers from other jurisdictions is that they are popular destinations, particularly for retirement. See, e.g., Robert M. Jarvis, *An Anecdotal History of the Bar Exam*, 9 GEO. J. LEGAL ETHICS 359, 397 (1996); Daniel R. Hansen, Note, *Do We Need the Bar Examination? A Critical Evaluation of the Justifications for the Bar Examination and Proposed Alternatives*, 45 CASE W. RES. L. REV. 1191, 1219 (1995). But it is worth noting that less “popular” states deny reciprocity. See NATIONAL CONFERENCE OF BAR EXAMINERS, COMPREHENSIVE GUIDE TO BAR ADMISSION REQUIREMENTS 2008, at 28, available at [http://www.ncbex.org/fileadmin/mediafiles/downloads/Comp\\_Guide/CompGuide.pdf](http://www.ncbex.org/fileadmin/mediafiles/downloads/Comp_Guide/CompGuide.pdf) (last visited Feb. 16, 2009).

157. At least sometimes lawyers take up arms against it. For example, Steve Levine “promised to do all [he] could to support the interstate practice of law” when he ran for president of the Wisconsin State Bar. See Steve Levine, *One Nation, Indivisible*, WIS. LAW., Mar. 2007, at 2, 2 (explaining opposition to pending proposals because they would “place an outmoded 20th century regulatory framework on interstate practice for decades to come”).

Angeles, where he grew up, to join the Paul Hastings office in London.<sup>158</sup> The reason? “There’s the weakness of the dollar” and clients want to diversify outside this country.<sup>159</sup> London may be a rather pedestrian destination. A recent article in the *ABA Journal* described the considerable rise in the number of U.S. firms opening offices in Dubai.<sup>160</sup>

These developments hardly fit the old-style model of lawyer regulation. Individual lawyers *need* to operate in more than one state, and perhaps more than one country. Thus, in *Michael Clayton*, the George Clooney figure must travel from New York to Wisconsin to deal with the behavior of the firm’s lead litigator during a deposition there. Law firms increasingly provide services across multiple venues using lawyers from multiple places to provide those services. Although the ABA in 2002 revised its Model Rules of Attorney Conduct to expand opportunities for “temporarily” practicing law in other jurisdictions,<sup>161</sup> the actual regimes of even the states that follow those Model Rules diverge from one another.

In 2006, Bob Stein, Executive Director of the ABA, predicted that “there will be extraordinary change in the relatively near future in the way our profession is regulated.”<sup>162</sup> As he noted, lawyers engage in representational activities in multiple jurisdictions with sufficient frequency that an ABA Commission in 2002 recommended a more liberal policy.<sup>163</sup> Meanwhile, the World Trade Organization was investigating the extent to which the current American methods of licensing lawyers interfere with fair trade.<sup>164</sup>

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158. See Niraj Chokshi, *Paul, Hastings Lawyer Moves to London*, S.F. RECORDER, Mar. 27, 2008, at 8.

159. *Id.*

160. See Jill Schachner Chanan, *Going for Gold in the Gulf*, A.B.A. J., Feb. 2008, at 18 (reporting that at least eleven U.S. firms have recently opened offices in Dubai).

161. See MODEL RULES OF PROF’L CONDUCT R. 5.5(c)(3) (2008) (allowing an attorney to provide legal services out-of-state so long as the services are “reasonably related to the lawyer’s practice in a jurisdiction in which the lawyer is admitted to practice”).

162. Stein, *supra* note 146, at 6.

163. See *id.* (citing COMM’N ON MULTIJURISDICTIONAL PRACTICE, AM. BAR ASS’N, REPORT 201B: ABA COMMISSION ON MULTIJURISDICTIONAL PRACTICE REPORT TO THE HOUSE OF DELEGATES 2-4 (Aug. 2002), available at <http://www.abanet.org/cpr/mjp/201b.doc>).

164. See *id.* & n.27. It appears that the collapse of the Doha Round has blunted formal action in regard to American restrictions on providing legal services. See generally Laurel S. Terry, *Current Developments Regarding the GATS and Legal Services: The Suspension of the Doha Round, “Disciplines” Developments, and Other Issues*, B. EXAMINER, Feb. 2007, at 27. The ABA has adopted a resolution supporting the development of practice admission rules that “do not unreasonably impinge on the regulatory authority of the states’ highest courts of appellate jurisdiction over the legal profession in the United States.” *Id.* at 28. See also ABA STANDING COMMITTEE ON PROFESSIONAL DISCIPLINE, RECOMMENDATION 105, at 6 (Aug. 7-8, 2006), available at <http://www.abanet.org/cpr/regulation/home.html>.

Surely the emergence of the Electronic Lawyer is not the sole cause of the current stresses on the traditional state-by-state regulatory apparatus. But equally surely electronic communications make that apparatus obviously inadequate for the demands of the twenty-first century, for it is now possible for a lawyer to engage in active practice in a distant state without leaving her home state. A recent personal jurisdiction ruling by the New York Court of Appeals is illustrative.<sup>165</sup> Plaintiff, a New York lawyer, was contacted by mail, email, and telephone by defendants, who operated a business in California and wanted to sue an Oregon company on a business-related claim.<sup>166</sup> He filed suit for them in federal court in Oregon, and later had a falling-out with his clients that led to his resignation from the case.<sup>167</sup> The Oregon court ruled that it did not have jurisdiction to award him a fee, although it did hold that the emails between the attorney and the clients established the attorney's right to a fair legal fee for his work.<sup>168</sup> He then sued the California clients for payment in New York.<sup>169</sup> The New York court upheld personal jurisdiction.<sup>170</sup>

The relevance of this case is that the New York lawyer did all his work on the case from New York.<sup>171</sup> His only contact with his clients was by telephone, email, and fax.<sup>172</sup> By telephone, he defended depositions, appeared at court conferences, and argued a motion for summary judgment.<sup>173</sup> True (and necessarily under our current system), he was admitted *pro hac vice* for the case by the Oregon court.<sup>174</sup> But the reality of this Electronic Lawyer's activities from New York underscores the difficulty of justifying the current regime in a day of instantaneous electronic communications.<sup>175</sup>

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165. *Fischbarg v. Doucet*, 880 N.E.2d 22 (N.Y. 2007).

166. *Id.* at 24–25.

167. *Id.* at 25.

168. *Id.*

169. *Id.* at 24.

170. *Id.*

171. *Fischbarg*, 880 N.E.2d at 24.

172. *Id.* at 24–25.

173. *Id.* at 24.

174. *Id.*

175. For other illustrations of this phenomenon, see *Medical Assurance Co. of Miss. v. Jackson*, 864 F. Supp. 576, 579 (S.D. Miss. 1994) (involving a suit alleging breach of settlement agreement against attorney who negotiated and concluded the settlement from another state); *Bond v. Messerman*, 895 A.2d 990, 993 (Md. 2006) (involving a malpractice suit against attorney who provided legal advice from another state regarding expungement of a criminal record); *Summit Lodging, LLC v. Jones, Spitz, Moorhead, Baird & Albergotti, P.A.*, 627 S.E.2d 259, 261–62 (N.C. Ct. App. 2006) (involving a malpractice suit against lawyers who drafted operating agreement, filed articles of organization, and conducted negotiations for purchase of property from another state).

## VII. ADDITIONAL ISSUES

The foregoing attempts to identify some issues that the emergence of the Electronic Lawyer has raised and will likely continue to raise. This Part identifies some additional issues that seem worthy of mention.

A. *The Attorney-Client Privilege*

There has never been a certain empirical basis for the attorney-client privilege,<sup>176</sup> but it is a hallmark of Anglo-American jurisprudence. Because it curtails access to what might well be highly important evidence, the privilege has also come under pressure. Wigmore, for instance, urged that it be restricted to its narrowest confines.<sup>177</sup> And doctrines of waiver have long been employed as one way to get around privilege.<sup>178</sup>

As the twenty-first century began, new pressures came to bear on the protection of the privilege. Most prominently, the U.S. Department of Justice (DOJ) policy known as the “Thompson Memo,” issued in 2003, has assertedly placed huge pressure on corporations to waive their privileges when under investigation in order to qualify as cooperating with the investigation.<sup>179</sup> The DOJ position assertedly led to a “culture of waiver” that excited strong opposition<sup>180</sup> and

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176. See David W. Louisell, *Confidentiality, Conformity and Confusion: Privileges in Federal Court Today*, 31 TUL. L. REV. 101, 112 (1956) (noting that there is no empirical evidence that the existence of the privilege actually promotes disclosure by clients).

177. According to Wigmore, “the privilege remains an exception to the general duty to disclose. . . . It ought to be strictly confined within the narrowest possible limits consistent with the logic of its principle.” 8 JOHN HENRY WIGMORE, *EVIDENCE IN TRIALS AT COMMON LAW* §2291, at 554 (McNaughton ed. 1961).

178. See Richard L. Marcus, *The Perils of Privilege: Waiver and the Litigator*, 84 MICH. L. REV. 1605, 1605–06 (1986) (discussing grounds for finding that privilege has been waived).

179. See Lawrence Hurley, *DOJ Considers Changes to Waiver Policy*, S.F. DAILY J., July 2, 2008, at 1.

180. See Liesa L. Richter, *Corporate Salvation or Damnation? Proposed New Federal Legislation on Selective Waiver*, 76 FORDHAM L. REV. 129, 133, 136–48 (2007). For an argument that increased activism by the DOJ is desirable, see Frank O. Bowman III, *Filling the Vacuum*, AM. LAW., Aug. 2008, at 138. Bowman explains:

Business is right in thinking that the Justice Department now has a greater presence in the corporate arena than ever before. Federal white-collar prosecutions increased throughout the 1990s, and despite some recent relaxation of effort, the quantity and significance of federal business crime cases remains historically high. But businesses should recognize this swarm of prosecutors as a pestilence it brought upon itself. In a period of chronic underregulation of business behavior, federal prosecutors stand as perhaps the only remaining authority able to hold corporate outlaws accountable for the misconduct that inevitably follows concentrations of wealth.



prompted proposed legislation.<sup>181</sup> At least one California court has labelled the DOJ program “coercive” and refused to find that submission of privileged materials to the DOJ waived the privilege in other litigation.<sup>182</sup> Eventually, the DOJ announced plans to change the waiver policy that might forestall a final vote on the legislation.<sup>183</sup> Nonetheless, other similar pressures exist, such as new proposed standards from the Financial Accounting Standards Board, which arguably might require revelation of otherwise privileged information.<sup>184</sup>

Given these manifold contemporary pressures on the privilege, it is hardly surprising to find that the advent of the Electronic Lawyer also puts potential pressure on the privilege. To start with an unnerving issue, it would surely be a challenge to adapt the privilege to an era in which the computer itself became the lawyer.<sup>185</sup> To the extent the privilege is necessary to encourage the client to make frank disclosures to the lawyer, it might be argued that similar insulation is necessary to encourage customers to be candid in making entries on TurboTax type programs designed to provide legal advice. But there could even be questions about whether those are “disclosures” within the meaning of the attorney-client privilege; perhaps they should be likened to diary entries or other such communications people have with themselves. On the other hand, so long as there is a possibility that provision of such programs for computerized self-help could constitute unauthorized practice of law,<sup>186</sup> it would seem consistent somehow to say that the privilege could apply.

Fortunately, we have not yet encountered these issues. But the era of the Electronic Lawyer has already generated new issues, or new versions of old issues. One area that has been significantly affected

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181. See Zach Lowe, *Attorney-Client Privilege Legislation Expected to Pass*, S.F. RECORDER, June 25, 2008, at 3 (reporting that proposed legislation passed the House of Representatives on a voice vote and was expected to pass the Senate).

182. See *Regents of the Univ. of Cal. v. Superior Court*, 81 Cal. Rptr. 3d 186, 194 (Cal. Ct. App. 2008).

183. See Lawrence Hurley, *DOJ Announces Changes to Privilege Waiver Policy*, S.F. DAILY J., July 10, 2008, at 1 (describing a letter from Deputy Attorney General Mark Filip to key lawmakers outlining plans for a change in DOJ policy).

184. See Sheri Qualters, *Litigation Disclosure Rule Faulted*, NAT'L L.J., June 30, 2008, at 8. As described in the article, the proposed new standards would require that public companies disclose their “best estimate” of their exposure in pending litigation and disclose information about their reserves for such litigation. *Id.* “The qualitative disclosures would most likely be based on confidential communication between companies and their counsel, said Clorox Co. Senior Vice President and Corporate Counsel Laura Stein . . .” *Id.*

185. See *supra* notes 64–107 (discussing the possibility of direct client service by computer program).

186. See *supra* notes 103–107 and accompanying text (discussing possible unauthorized practice of law issues relating to computerized self-help programs).

has been initial contacts with clients. Until recently, lawyers made contact with clients either over the telephone or by office visits, events that the lawyer could arrange in a way that both ensured an appropriate understanding of whether an attorney-client relationship had been established and provided suitable protections for client (and prospective client) confidences. But as a 2005 Ninth Circuit decision recognized, things have changed:

What is “new” about the case is attorneys trolling for clients on the internet and obtaining there the kind of detailed information from large numbers of people that used to be provided only when a potential client physically came into the lawyer’s office. Two things had to happen to bring this about: the change in law in the 1970s that permitted attorney advertising, and the sufficiently widespread use of the internet, within the past five or ten years, that makes internet advertising worthwhile.<sup>187</sup>

The magnitude of these changes will almost certainly increase, and new privilege issues will arise. To get a feel for the potential, consider that one study reported that some four million people a month used the Internet to search for legal services in 2006 and forecast that the number would reach seven million per month in 2007.<sup>188</sup> The *ABA Journal* reports that “[f]or lawyers, one byproduct of the explosion in electronic communications has been an increase in unsolicited e-mails from people seeking legal services.”<sup>189</sup> The article details examples of lawyers who had been retained by one party to a dispute receiving electronic communications from the adverse party providing incriminating information. Should this information be covered by the privilege? Could the adverse party claim to be a “client” when the lawyer already had a client involved in the dispute? The resolution of these issues may depend on the exact content of the lawyers’ web pages in making clear that no lawyer-client relationship exists unless some further event occurs, such as formal retention.<sup>190</sup>

Working out that question can prove difficult. In the Ninth Circuit case quoted above, a law firm interested in representing users of the pharmaceutical Paxil posted a questionnaire on the Internet seeking information from “potential class members.”<sup>191</sup> Those interested in legal services were to fill out a form, but to do so they had to click a

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187. *Barton v. U.S. Dist. Court*, 410 F.3d 1104, 1109 (9th Cir. 2005).

188. Geri L. Dreiling, *Choosing Up Sides*, A.B.A. J., May 2007, at 28 (reporting results of study by the Pew Internet & American Life Project). The article reports on the issues raised by online “legal match” services that put potential clients in contact with potential attorneys, and particularly the question of referral fees. *Id.*

189. Kathryn A. Thompson, *The Too Much Information Age*, A.B.A. J., July 2007, at 28.

190. *See id.* at 29.

191. *Barton*, 410 F.3d at 1107.

“yes” box acknowledging that the questionnaire “does not constitute a request for legal advice and that I am not forming an attorney-client relationship by submitting this information.”<sup>192</sup> Eventually, the district court did not certify a class, but four who filled out the forms (as thousands of other people also had) retained the firm to file suit on their behalf.<sup>193</sup> Defendant demanded production of the four clients’ answers to the questionnaire as the trial approached, and the district court ordered production, stressing that the form itself said there was no attorney-client relationship.<sup>194</sup>

The court of appeals reversed, finding under California law that this disclaimer did not prevent a prospective client from relying on confidentiality even when there was no existing attorney-client relationship.<sup>195</sup> It recognized that the law firm had to have such a provision to protect itself against possible malpractice liability to all who submitted forms, and emphasized that, although the form said there was no attorney-client relationship, it was consistent with the firm maintaining confidentiality of the answers (although saying explicitly that the answers would be held in confidence would probably be a good idea).<sup>196</sup>

Contrast a district court decision in a suit brought by the ACLU regarding police activities during the 2004 Republican National Convention.<sup>197</sup> The ACLU had an online “intake form” that invited anyone to submit information on his or her interaction with the police, the use of force by the police, and similar matters.<sup>198</sup> In the ACLU’s suit, the city demanded production of the online reports.<sup>199</sup> The court ruled that they were not protected by the attorney-client privilege, distinguishing the Ninth Circuit decision on the ground that the form in

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192. *Id.* at 1107 n.5. Formal Opinion 07-445 by the ABA explains as follows:

Before the class has been certified by a court, the lawyer for plaintiff will represent one or more persons with whom a client-lawyer relationship clearly has been established. As to persons who are potential members of a class if it is certified, however, no client-lawyer relationship has been established. A client-lawyer relationship with a potential member of the class does not begin until the class has been certified and the time for opting out by a potential member of the class has expired. If the client has neither a consensual relationship with the lawyer nor a legal substitute for consent, there is no representation. Therefore, putative class members are not represented parties for purpose of the Model Rules prior to certification of the class and the expiration of the opt-out period.

ABA Comm. on Ethics and Prof’l Responsibility, Formal Op. 07-445 (2007), *reprinted in* ABA, *LAWYER’S MANUAL ON PROFESSIONAL CONDUCT* 109, 111 (2007).

193. *Barton*, 410 F.3d at 1106 n.1.

194. *Id.* at 1108.

195. *Id.* at 1111.

196. *Id.* at 1111–12.

197. *Schiller v. City of New York*, 245 F.R.D. 112 (S.D.N.Y. 2007).

198. *Id.* at 113–14.

199. *Id.* at 115.

this case says nothing about providing legal services, and that there was no showing that those who filled out the forms were seeking legal representation.<sup>200</sup>

Once the attorney-client relationship has been formally established, additional issues confront the Electronic Lawyer. Until recently, it was fairly clear how to communicate with the client—in person, by letter, or by telephone. True, cellphones may increase the risk of interception (as Newt Gingrich discovered when his cellphone activities were tape recorded),<sup>201</sup> but so long as one was prudent about such communications one could be relatively confident that the privilege would apply.

Nowadays, a large proportion of the U.S. population relies on email or instant messaging and texting to communicate. The security of these new media is at least uncertain. Attorneys' initial unease about email may have been overstated,<sup>202</sup> but the ease of forwarding and the tendency to send copies to multiple recipients both place pressure on the privilege under the Wigmorean attitude that any disclosure outside the charmed circle destroys the privilege for all and for all time. The advent of E-Discovery poses new challenges to preserving the privilege.

These complications may proliferate because people often use their computers at work for multiple purposes, including communicating with their lawyers. Employers generally have a right to inspect what their employees do using the employer's computer,<sup>203</sup> and they are increasingly prone to do so. Indeed, they may have a duty to engage in such surveillance of employee computer use to guard against workplace harassment and the like. Beyond that, increasingly refined programs exist to enable them to achieve marketing and other goals.<sup>204</sup> What if the employee uses the employer's system (including handheld devices like a BlackBerry) to communicate with her lawyer? In a New York case in which a doctor filed a breach of contract action

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200. See *id.* at 116–18.

201. In 1996, while Gingrich was Speaker of the House, two citizens used a police scanner to record a telephone conference call in which Gingrich discussed imminent ethics charges. See Adam Clymer, *Gingrich Is Heard Urging Tactics in Ethics Case*, N.Y. TIMES, Jan. 10, 1997, at A1 (describing taped conversation). Two days later the contents of the tape were on the front page of the *New York Times*. *Id.*

202. See, e.g., David Hricik & Amy Falkingham, *Lawyers Still Worry Too Much About Transmitting E-Mail over the Internet*, 10 J. TECH. L. & POL'Y 265 (2005).

203. See *Fraser v. Nationwide Mut. Ins. Co.*, 352 F.3d 107 (3d Cir. 2003) (holding that an employer's sifting through an employee's email did not violate federal privacy protections).

204. See, e.g., William M. Bulkeley, *Email Software Delves Into Employees' Contacts*, WALL ST. J., Apr. 21, 2008, at B9 (describing programs that enable companies "to mine their employees' emails and electronic address books for contact information").

against the hospital at which he worked, the court ruled that the doctor's email communications with his lawyer using the hospital computer system were not covered by the privilege.<sup>205</sup>

The foregoing privilege issues are not qualitatively different from similar issues that have existed before, but their importance is likely to increase in the future as the Electronic Lawyer tries to obtain the same protections that the privilege provided in the past.

### B. *Coping with the Surveillance Society*

A second emerging concern is not so much about the activities of the Electronic Lawyer as it is about the consequences of high-tech information-gathering and the resulting potential for governmental surveillance.<sup>206</sup>

For lawyers, the development of the laptop and other handheld computer devices has opened a world of communication formerly unimaginable. A laptop can store and make available at any location much of what a law office contains, including a variety of extremely sensitive materials. That's why the electronic law office is quite different from earlier operations.<sup>207</sup> But as unfortunate experiences with laptops containing other types of sensitive data have shown,<sup>208</sup> some significant risks accompany these benefits. Given the growing globalization of law practice, lawyers crossing borders face the additional risk that government agents will insist on access to all files on their computers. In the view of two criminal defense lawyers, "attorneys traveling with computers containing legal files are faced with a Hobson's choice. Customs officials and other federal agents may now

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205. *Scott v. Beth Israel Med. Ctr., Inc.*, 847 N.Y.S.2d 436, 443 (N.Y. Sup. Ct. 2007). For a similar example, although perhaps with an important difference, see Jonathan D. Glater, *Open Secrets*, N.Y. TIMES, June 27, 2008, at C1. The article describes a suit brought by the former president of a company against the company, claiming that it improperly accessed his Yahoo email account and read attorney-client communications on that account. *Id.* In the words of plaintiff's attorney, "It's kind of like the other side gets your playbook or they're spying on your locker room." *Id.* The company said that it was able to access the Yahoo account because plaintiff had used one of its computers to access the account and improperly send confidential company information to the account. *Id.*

206. See generally Jack M. Balkin, *The Constitution and the National Surveillance State*, 93 MINN. L. REV. 1, 19–21 (2008) (discussing "National Surveillance State" of governmental use of data collection, and the limited effect of Fourth Amendment protections against such activity).

207. See *supra* notes 108–135 and accompanying text.

208. See, e.g., Rick Weiss & Ellen Nakashima, *Stolen NIH Laptop Held Social Security Numbers*, WASH. POST, Apr. 10, 2008, at A5 (reporting on loss of information of about 1200 participants in a National Institutes of Health study); Eric Dash, *Ameriprise Says Stolen Laptop Had Data on 230,000 People*, N.Y. TIMES, Jan. 26, 2006, at C5 (reporting that company laptop with information including social security numbers and internal account numbers had been stolen).

search any computer at the border for any reason, or no reason at all.”<sup>209</sup>

But most travel and activity by American lawyers does not presently involve crossing borders, and lawyers are rarely the objects of governmental scrutiny. Their clients may be, however, and they are subject to a growing array of search techniques, including regular seizure and search of suspects’ computers. Beyond that, increasingly large sectors of domestic public space are subject to twenty-four-hour surveillance by increasingly sophisticated video devices. As a former Director of the Federal Bureau of Investigation reports, efforts to defeat terrorists have amplified these activities: “The British agency responsible for internal affairs spends nearly three-quarters of its crime prevention budget on the administration, operation, and maintenance of [video] cameras—one for every 14 inhabitants of the United Kingdom . . . .”<sup>210</sup> Global positioning systems, meanwhile, enable law enforcement to monitor the precise movements of a vehicle or other physical item for weeks or months at a time.<sup>211</sup>

Anyone who watches television crime shows will appreciate the impact these technologies have had on twenty-first-century law enforcement activities; it seems from *CSI* and similar shows that crime detection would be impossible without them. But what of the privacy of all the rest of us? The former FBI Director’s conclusion was that “pervasive video surveillance threatens fundamental tenets of our democratic society.”<sup>212</sup> For lawyers, the question is whether current legal protections are sufficient. Professor Kerr, for example, believes that major changes in Fourth Amendment analysis are necessary to deal properly with the search of computers.<sup>213</sup> Professor Hutchins

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209. Nanci Clarence & Craig Bessener, *They Have Ways of Making Your Laptop Talk*, S.F. RECORDER, June 27, 2008, at 5. This article was prompted by *United States v. Arnold*, 533 F.3d 1003 (9th Cir. 2008), which rejected Fourth Amendment objections to the search at the Los Angeles airport of the laptop of a passenger from the Philippines that revealed child pornography, leading to a prosecution for possession of child pornography. In that case, the Ninth Circuit held that, because this was a border search there was no need for probable cause to justify it. *Id.* at 1010; see also David E. Brodsky et al., *At Border, Laptops Are Open Books*, NAT’L L.J., July 21, 2008, at S1 (reporting that some foreign companies “have instructed executives to keep confidential business information off their traveling laptops” in reaction to the possibility of search at U.S. borders).

210. William S. Sessions, *Evil Eye*, AM. LAW., Nov. 2007, at 75. Recently, one MP resigned from the Tory Party in part in protest against the development of what he called “a database society” in England. See *Davis Blows His Top*, ECONOMIST, June 14, 2008, at 71.

211. See Renée McDonald Hutchins, *Tied Up in Knotts? GPS Technology and the Fourth Amendment*, 55 UCLA L. REV. 409, 414–21 (2007).

212. See Sessions, *supra* note 210, at 75.

213. See Orin S. Kerr, *Searches and Seizures in a Digital World*, 119 HARV. L. REV. 531, 537 (2005) (asserting that “[t]he widespread use of computers in recent years has led to a new type of

similarly thinks that proper Fourth Amendment treatment of the use of GPS technology will require that use of this technology only be permitted after issuance of a warrant.<sup>214</sup>

In regard to all these technologies, lawyers will have to litigate the protections in court. In criminal cases, the issues may come up on motions to suppress evidence obtained by such technological means. In criminal and civil cases, lawyers will be called upon to litigate the additional protections provided by statutes for the privacy of users of various sorts of electronic communication devices. As a panel of the Ninth Circuit recently put it in holding in a civil case that a city violated the Fourth Amendment by reading the erotic text messages one of its policemen sent his wife on his city-provided pager:

The extent to which the Fourth Amendment provides protection for the contents of electronic communications in the Internet age is an open question. The recently minted standard of electronic communication via e-mails, text messages, and other means opens a new frontier in Fourth Amendment jurisprudence that has been little explored.<sup>215</sup>

Somewhat similar issues may increasingly be involved in a whole range of civil cases when parties seek E-Discovery, “the hottest issue by far” in legal tech circles.<sup>216</sup> Initially, the heat generated by E-discovery was from corporations and other large organizations concerned about the burdens of producing huge amounts of electronically stored information.<sup>217</sup> That is why the pressures of E-Discovery are contributing to the creation of a new niche of lawyers in some law firms.<sup>218</sup> For some time, many seemed to have thought that E-Discovery was a problem only for such large organizations. But the perva-

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search”); Orin Kerr, *Digital Evidence and the New Criminal Procedure*, 105 COLUM. L. REV. 279, 293 (2005) (asserting that administrators of ISPs can access “a user’s entire online world”). For further discussion of whether there has been a revolution in criminal procedure as a result, see generally Marcus, *supra* note 10. See also Adam M. Gershowitz, *The iPhone Meets the Fourth Amendment*, 56 UCLA L. REV. 27 (2008) (discussing the Fourth Amendment ramifications of the multiple applications of iPhones if they can be searched incident to a search).

214. See Hutchins, *supra* note 211, at 464–65.

215. *Quon v. Arch Wireless Operating Co.*, 529 F.3d 892, 904 (9th Cir. 2008). The city did not possess the contents of the messages and had to get them from a company that provided the messaging service. *Id.* at 898. The court also held that the company had violated the Stored Communications Act in turning the messages over to the city. *Id.* at 903.

216. Jake Widman, *Discovering a New Practice*, CAL. LAW., July 2008, at 26.

217. This was the pervasive thrust of the hearings and consultations that led to amendments to the Federal Rules of Civil Procedure to adapt them to E-Discovery that went into effect on December 1, 2006. I served as Special Reporter to the Advisory Committee on Civil Rules in connection with the drafting of those rule amendments. The sentence in text summarizes that experience, including the public commentary and hearings phase of the amendment activity. In this piece, I am speaking only for myself and not for the Advisory Committee or anyone else.

218. See *supra* notes 113–118 and accompanying text.

siveness of electronic communications has led to similar concerns on both sides of the aisle, underscoring the consequences for lawyers of the surveillance society. For example, a recent article in *Trial* magazine counsels plaintiffs' lawyers as follows:

To effectively represent a client now, you need to be well aware of the types of evidence that he or she—or family members, friends, and so on—has posted on the Internet. More and more, defendants request production of the client's personal computer, giving rise to legal issues such as relevance, the client's privacy, and third-party privacy.<sup>219</sup>

The sorts of concerns lawyers must have about their own computers when crossing borders<sup>220</sup> will increasingly apply to discovery in much civil litigation; like the police, civil litigants may obtain access to much previously confidential information.

### C. The Electronic Law School

What of the electronic law school? Law schools might change a great deal due to the advent of universal electronic communications. "Distance learning" is now possible in ways not formerly true. Should it be tried for legal education? Law schools could embrace this trend and substitute online instruction for the traditional in-class variety. There is at least one law school—the Concord Law School—that provides an entirely online experience.<sup>221</sup> To date, the ABA has stood firm against this sort of innovation.<sup>222</sup> Concord Law School is therefore not ABA-accredited, and the only state in which its graduates can take the bar examination is California, which does not require attendance at an ABA-accredited law school.<sup>223</sup> Although the days of

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219. Karen Barth Menzies, *Perils and Possibilities of Online Social Networks*, TRIAL, July 2008, at 58, 60.

220. See *supra* note 209 and accompanying text.

221. For Concord Law School's online self-description, see <http://www.concordlawschool.edu> (last visited Feb. 16, 2009). See generally DAVID I.C. THOMSON, LAW SCHOOL 2.0 (2009) (describing ways in which law school could be revised to exploit the capabilities of computers and the Internet).

222. See, e.g., ABA SECTION OF LEGAL EDUCATION AND ADMISSIONS TO THE BAR, STANDARDS AND RULES OF PROCEDURE FOR APPROVAL OF LAW SCHOOLS, Standard 306(d) (providing that, although a law school may grant credit toward a J.D. degree for study offered through distance learning, it may not do so for more than a total of twelve credit hours). For an argument that law schools will need to add distance education, see Diana L. Gleason, *Distance Education in Law School: The Train Has Left the Station*, 2006 BERKELEY ELECTRONIC PRESS LEGAL SERIES No. 1762, available at <http://law.bepress.com/expresso/eps/1762>.

223. On occasion, Concord Law School graduates have received waivers that permitted them to take bar examinations alongside graduates of traditional law schools. See Kristina Horton Flaherty, *Court Win for Online Law School Grad*, CAL. ST. B.J., Jan. 2009, at 6 (reporting ruling permitting Concord Law School graduate to take Massachusetts bar exam).



Kingsfield are gone (if ever they existed),<sup>224</sup> law schools continue to adhere to in-class instruction, sometimes “socratic.”

The electronic law student therefore attends a class in much the same way as her predecessors, but her experience has been altered by the advent of electronic communications. Almost all law students use laptop computers, in class and out. All or almost all faculty applaud the change from having to read handwritten exams to being able to read laptop-generated typewritten ones. In-class use of laptops has not had such a warm reception, however. The question whether to ban laptops from the classroom has generated considerable controversy, which illuminates the ways in which laptops could alter the in-class experience.<sup>225</sup> Those who have banned laptops or considered doing so emphasize various effects. Laptops are a distraction in a way that is not true of notebooks for handwriting; students can do almost anything—check email, send instant messages, watch movies, view pornography, play games—rather than pay attention to what’s going on in class, and they do.<sup>226</sup> These activities can have an impact on other students in the class. At a minimum, they likely mean that the student engaged in them is not ready to respond to questions about the class discussion.<sup>227</sup> Beyond that, laptops can distract other students in the classroom.<sup>228</sup> Altogether, they can harm class discussion.<sup>229</sup>

Laptop computers also permit students to take down everything, a “stenographic” approach to class that is inconsistent with the sort of analytical activity classroom discussion is designed to stimulate.<sup>230</sup> Other faculty counter that the real problem is boring classes; they say that the solution is to liven up classes, partly with technological whiz-bang adjuncts to the instructional enterprise.<sup>231</sup> This debate is ongoing, but it underscores the potential effect of technology on the law school experience. Obviously, those who favor distance learning via computer are likely to place less stress on traditional in-class instructional practices than most. But for the present, it seems that the impulse is to adapt that technique; Langdell’s method has not been killed by laptops.

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224. See *supra* note 70 and accompanying text.

225. See Kevin Yamamoto, *Banning Laptops in the Classroom: Is it Worth the Hassles?*, 57 J. LEGAL EDUC. 477 (2007) (citing multiple sources).

226. See *id.* at 487–89.

227. *Id.* at 487.

228. *Id.* at 487–89.

229. *Id.* at 489–90.

230. See *id.* at 490–91.

231. Yamamoto, *supra* note 225, at 481.

The out-of-class character of legal education may change. Whether to instruct students on legal research in libraries rather than solely online can be debated.<sup>232</sup> The law school casebook “is probably on its way to extinction,” according to one advocate of electronic casebooks.<sup>233</sup> But that seems not to have happened yet; even if we have arrived at the paperless law office, we have not arrived at the paperless law school. The debate over whether to ban laptops from the classroom underscores this point. One of the proposed reasons for doing so is to permit students more space to have casebooks open before them.<sup>234</sup> Surely banning laptops from the classroom is not consistent with relying on electronic casebooks, unless there is some other way for students to use electronic casebooks.

So for the near future, it seems likely that the profession will find that newly minted lawyers have emerged from a law school experience relatively similar to the experience of past generations. Their experience beyond law school may vary more significantly. Concern in the profession about the limited writing skills of many new lawyers will probably deepen as a generation steeped in instant messaging and its indifference to conventional grammar arrives at the office. The short attention spans of this newest generation may present challenges also. But as jurors are increasingly drawn from the ranks of this newer generation, its lawyers may be singularly effective in tailoring their messages to suit the new-style juror.

Perhaps the greatest change to legal education wrought by electronic communications has been for faculty, not students. They can now exchange ideas and drafts with colleagues across the country and across the world. Collaboration has become easier. Some types of data analysis—important in a day of multidisciplinary work—are considerably easier. And, perhaps most importantly, now there is blogging. It is said that about ten percent of all adult Americans have

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232. See, e.g., Sarah Hooke Lee, *Survey on Access and Teaching of Alternative Legal Research Using Internet Portals and Gateways*, in 12 BRIEFS IN LAW LIBRARIANSHIP SERIES 3–4 (Roberta Studwell ed., 2006) (describing the evolving methods of teaching legal research); Ian Gallacher, *Forty-Two: The Hitchhiker's Guide to Teaching Legal Research to the Google Generation*, 2005 BERKELEY ELECTRONIC PRESS LEGAL SERIES No. 701, at 8, <http://law.bepress.com/expresso/eps/701> (discussing the “cultural conflict” between those who favor a “books first” approach and those who favor beginning with online research); Thomas Keefe, *Teaching Legal Research from the Inside Out*, 97 LAW LIBR. J. 117 (2005) (urging emphasis on online sources for teaching legal research).

233. Matthew Bodie, *The Future of the Casebook: An Argument for an Open-Source Approach*, 57 J. LEGAL EDUC. 10 (2007).

234. See Yamamoto, *supra* note 225, at 492 (“[T]here is no space for a laptop, casebook, and Codebook on their desks.”).

blogs.<sup>235</sup> Certainly a significant proportion of American law professors blog on a regular basis. Consider Professor Volokh, one of the most successful American legal scholars of his generation. He also has a blog, which regularly receives 20,000 hits a day.<sup>236</sup> The success of his blog has caused him to ask “just how much should we value our ‘traditional scholarship.’”<sup>237</sup> Others have considered similar issues.<sup>238</sup> Nonetheless, for the practicing lawyer legal scholarship has long since become relatively unimportant, and this shift in faculty behavior is unlikely to loom large.

In sum, although greater changes may occur, it does not appear that traditional legal education is poised for a metamorphosis into electronic legal education in a way that will present significant challenges to the profession.

### VIII. QUESTIONS ABOUT CAUSATION AND NOSTALGIA

Law practice has changed greatly in the last fifty years, since the “golden age” identified by some.<sup>239</sup> These changes have presented challenges for the profession, and the advent of the Electronic Lawyer may add new challenges. But there seems too much temptation to treat the past as golden without looking sufficiently carefully at it, and too much temptation to treat such developments as the advent of pervasive electronic communications as causal factors when they should more properly be viewed, at best, as facilitators for changes whose underlying cause lies elsewhere. As *The Economist* observed in a recent study of governmental bureaucracy, “processing power and good software can make government more user-friendly and sometimes also more efficient, but technology on its own cannot compensate for the mistakes of bureaucrats and politicians.”<sup>240</sup> I pause here, there-

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235. See Kara Jessela, *Blogging's Glass Ceiling*, N.Y. TIMES, July 27, 2008, at ST 2 (reporting that fourteen percent of American men and eleven percent of American women have blogs).

236. See Eugene Volokh, *Scholarship, Blogging, and Tradeoffs: On Discovering, Disseminating, and Doing*, 84 WASH. U. L. REV. 1089, 1089 (2006).

237. *Id.*

238. For further discussion, see the symposium issue *Bloggership: How Blogs Are Transforming Legal Scholarship*, 84 WASH. U. L. REV. 1025–1261 (2006) (containing numerous articles discussing blogging and legal scholarship). Of particular interest are Lawrence B. Solum, *Blogging and the Transformation of Legal Scholarship*, 84 WASH. U. L. REV. 1071 (2006); James Lindgren, *Is Blogging Scholarship? What Do You Want to Know?*, 84 WASH. U. L. REV. 1105 (2006); Orin S. Kerr, *Blogs and the Legal Academy*, 84 WASH. U. L. REV. 1127 (2006); Randy E. Barnett, *Caveat Blogger: Blogging and the Flight from Scholarship*, 84 WASH. U. L. REV. 1145 (2006).

239. See, e.g., GALANTER & PALAY, *supra* note 7, at 20–36 (describing 1950s and 1960s as the “golden age” of private law practice).

240. *The Electronic Bureaucrat, A Special Report on Technology and Government*, ECONOMIST TECH & GOV'T REP., Feb. 16, 2008, at 4.

fore, to caution that if the “fixer” portrayed in *Michael Clayton* is indeed the future of the Electronic Lawyer, it may not be because of the electronic aspects of the lawyer’s practice.

The sociologist C. Wright Mills saw larger forces at work more than fifty years ago when he reflected on the mid-century fate of professions in America:

In no sphere of twentieth-century society has the shift from the old to the new middle-class condition been so apparent, and its ramification so wide and deep, as in the professions. Most professionals are now salaried employees; much professional work has become divided and standardized and fitted into the new hierarchical organizations of educated skill and service; intensive and narrow specialization has replaced self-cultivation and wide knowledge; assistants and sub-professionals perform routine, although often intricate, tasks, while successful professional men become more and more the managerial type.<sup>241</sup>

Mills’s description captures many aspects of the modern law firm that trouble thoughtful legal professionals. Law firms now feature salaried lawyers in place of true partners; standardized, specialized work in place of the generalist orientation of old; and hierarchy with numerous layers of lawyers ranging from equity partners to other “partners” to associates to staff attorneys to contract attorneys, all sometimes governed by a nonlawyer firm manager. Writing in the 1950s, Mills was struck that the professions of law and medicine “remain free” and that they “have in a curious new way become a new seat of private-enterprise practice.”<sup>242</sup> It seems that developments since the 1950s—the growth of the commercial law firm for lawyers and the growth of managed care for doctors—have eroded their prior exceptional status. For many—particularly Dean Kronman<sup>243</sup>—these developments have also undercut critical features of what they do as professionals.

Whether the lawyer-statesmen Dean Kronman reveres predominated in a prior era is at least uncertain, however. In 1905, Louis Brandeis asserted that “able lawyers have, to a great extent, allowed themselves to become adjuncts of great corporations.”<sup>244</sup> Two years later, John Dos Passos, Sr. (father of the great novelist) wrote that in his modern world “[l]awyers are made up to be mere instruments for their clients, without any attention being paid to their

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241. MILLS, *supra* note 19, at 112; see also DONALD A. SCHÖN, *THE REFLECTIVE PRACTITIONER: HOW PROFESSIONALS THINK IN PRACTICE* 5 (1983) (asserting that “there has been a virulent ideological attack on the professions, mostly from the Left”).

242. MILLS, *supra* note 19, at 112–13.

243. See KRONMAN, *supra* note 4.

244. Louis Brandeis, *The Opportunity in the Law*, 39 AM. L. REV. 555, 559–61 (1905), quoted in HEINZ ET AL., *supra* note 140, at 180.

duties to the State.”<sup>245</sup> He asserted that the legal profession reached its zenith just before the Civil War,<sup>246</sup> although he also traced the emergence of unprofessional tendencies to 1275, when lawyers began representing individual clients.<sup>247</sup> He also lambasted the Langdellian case method.<sup>248</sup>

Connecting this welter of century-old views to the issues embroiling the profession today is not easy. As early as 1939, a writer lambasted the “law factories,” using a term he said was “widely used in the legal profession.”<sup>249</sup> Compared to the law firms of today, of course, pre-World War II law firms look like intimate and congenial places. And Dos Passos’s high-toned rhetoric might be measured against some of his actions. Thus, Howe & Hummell, the “Cadwalader, Wickersham & Taft of low practice” of the era,<sup>250</sup> frequently turned cases over to Dos Passos “when it was felt that the name of the shyster firm would be a liability.”<sup>251</sup> Moreover, Howe & Hummell itself was regarded as a “law factory” in the late nineteenth century.<sup>252</sup>

Whatever golden age one invokes—whether before the Civil War or after World War II—was also an age of pervasive ethnic and racial discrimination.<sup>253</sup> Even Dean Kronman acknowledges that large law

245. JOHN R. DOS PASSOS, *THE AMERICAN LAWYER: AS HE WAS—AS HE CAN BE* 50–51 (1907). “The modern idea of a great lawyer is one who can most successfully *manipulate* the law and the facts.” *Id.* at 130–31.

246. *Id.* at 31.

247. *Id.* at 9–11.

248. As Dos Passos explains:

Modern methods of legal education are akin to the age. Lawyers are machine made. . . . The aim of law schools and colleges is to manufacture the lawyers quickly. Hardly any of the instructors or professors have any practical knowledge of the profession. They are theorists and students. They have no clinical experience.

*Id.* at 55.

249. See Ferdinand Lundberg, *The Law Factories: Brains of the Status Quo*, HARPER’S MAG., July 1939, at 180, 180. Lundberg posited that “[m]any lawyers have quit the law factories to escape monotony” due to “[t]he robotization to which the members of large law-office staffs lend themselves.” *Id.* at 182.

250. RICHARD H. ROVERE, *HOWE AND HUMMELL: THEIR TRUE AND SCANDALOUS STORY* 123 (1985) (1947). Rovere reports that Howe & Hummell “had bribed judges, suborned perjury, and engaged in every other malpractice.” *Id.* at 73.

251. *Id.* at 49.

252. Rovere recounts:

“Talk about your law factories,” one local attorney, a man who started his career as an office boy with Howe & Hummell fifty years ago, recalled the other day, “that was the only one I ever heard of that had a night shift. The doors were open around the clock. You could get a lawyer from Howe & Hummell at four in the morning if you wanted to.”

*Id.* at 125–26.

253. See, e.g., Eli Wald, *The Rise and Fall of the WASP and Jewish Law Firms*, 60 STAN. L. REV. 1803 (2008) (describing the discrimination against Jewish lawyers at leading firms in the period after World War II).

firms have improved in that sort of egalitarian terms.<sup>254</sup> Whether law firms today are entirely at the beck and call of their clients is not entirely clear. Thus, Professor Heinz and his colleagues, writing in 2005, note that “[t]he superior social position of business lawyers may permit them to exercise considerable professional autonomy even though their clients typically have bargaining power.”<sup>255</sup> In *Michael Clayton*, the head of the litigation department decides to violate his code of loyalty to the client and publicize harmful documents about what the client did. Without going that far, others may influence what clients do.

But this seemingly eternal tension about independence and loyalty to clients is ultimately somewhat beside the current point. The real question is whether the circumstances of the Electronic Lawyer are singular because she is the *electronic* lawyer. That seems difficult to establish. As Professors Galanter and Henderson have recently emphasized, technological changes have pervasively affected the practice of law.<sup>256</sup> To take just one illustration, E-Discovery has changed the way many firms operate. Some treat it as a practice area.<sup>257</sup> More have responded by creating a new “professional” position within the firm for staff attorneys dedicated to E-Discovery matters, or instead have turned to temporary attorney employees to handle the document review work that is required for E-Discovery.<sup>258</sup> These professionals operate in a world very much like the one described by Mills,<sup>259</sup> in dead-end positions designed to free up regular associates from performing these tasks.<sup>260</sup> They may work in “some grim environments,” and most firms don’t allow temps to make phone calls, use the In-

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254. See KRONMAN, *supra* note 4, at 291–92.

255. HEINZ ET AL., *supra* note 140, at 115.

256. See *supra* note 134 and accompanying text.

257. See, e.g., Widman, *supra* note 216, at 26 (reporting that some firms have established formal E-discovery practice groups); Janet H. Kwon & Karen Wan, *High Stakes for Missteps in EDD*, N.J. L.J., Dec. 31, 2007, at E2 (observing that “it is unclear to what extent e-discovery can be considered a specialized substantive expertise in the same vein as, for example, patent law, or whether it is more akin to a learnable skill such as taking depositions”).

258. See Julie Friedman, *Temporary Solution*, AM. LAW., Sept. 2006, at 97 (describing the use of temporary lawyers to handle E-Discovery issues); Kellie Schmidt, *McDermott Plans to Fill Cheap Seats*, S.F. RECORDER, Nov. 1, 2007, at A1 (describing plan by Chicago firm McDermott, Will & Emery to create a “new tier of attorneys”—permanent contract associates—to handle E-Discovery).

259. See *supra* note 241 and accompanying text.

260. Thus, an attorney at the Washington D.C. firm Howrey explained: “Associates understand that if [they] come to Howrey, the grunge work typically offered to junior associates is going to go to several layers of folks devoted to that work. That’s a major selling point.” Friedman, *supra* note 258, at 101.

ternet, or use email on the job.<sup>261</sup> For temporary E-Discovery attorneys, this is hardly a golden age.<sup>262</sup>

But the more general notion that pervasive changes in the legal profession resulted from technological advances is harder to accept.<sup>263</sup> As we've already seen, some of these changes began over a century ago,<sup>264</sup> and although many relate in a general way to the phenomenon of "globalization," they hardly seem to be fueled primarily by the advent of the Electronic Lawyer.

More generally yet, the whole notion that technology drives social change is at least debatable. Seventy-five years ago, Lewis Mumford set out to explore the connection between social change and the development of what he called "the machine," by which he meant the aggregate set of mechanized products on which twentieth-century society depended.<sup>265</sup> His thesis was that something more than technological innovation was necessary to supply the germ of social change: "Before the new industrial processes could take hold on a grand scale, a reorientation of wishes, habits, ideas, goals was necessary."<sup>266</sup> The need for this transformation of attitudes, he said, emerged only in Western Europe:

Other civilizations reached a high degree of technical proficiency without, apparently, being profoundly influenced by the methods and aims of techniques. All the critical instruments of modern technology—the clock, the printing press, the water-mill, the magnetic compass, the loom, the lathe, gunpowder, paper, to say nothing of mathematics and chemistry and mechanics—existed in other cultures. The Chinese, the Arabs, the Greeks, long before the Northern European, had taken most of the first steps toward the machine . . . . They had machines; but they did not develop "the machine." It remained for the peoples of Western Europe to carry the physical sciences and the exact arts to a point no other culture had reached, and to adapt the whole mode of life to the pace and capabilities of the machine.<sup>267</sup>

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261. *Id.* at 100.

262. An anonymous piece in the *ABA Journal* illustrates. The author, a former law firm associate who was laid off, found work as a contract attorney doing "mind-numbing" work reviewing electronic materials for production in discovery. Anonymous, *Down in the Data Mines: A Tale of Woe from the Basement of Legal Practice*, A.B.A. J., Dec. 2008, at 32. The author adds that "[i]n social situations I avoid telling people what I do—I am somewhat embarrassed," for "[i]f I tell them that I am a contract attorney, it is to admit that—despite being highly educated—I spend my days reading someone else's emails." *Id.*

263. See Marcus, *supra* note 10.

264. See *supra* notes 244–245 and accompanying text.

265. LEWIS MUMFORD, *TECHNICS AND CIVILIZATION* 9–59 (1934).

266. *Id.* at 3.

267. *Id.* at 4.

More recent work has carried forward this analysis,<sup>268</sup> although there are surely dissenting voices.<sup>269</sup> For our purposes, it suffices to recognize that one must be cautious in attributing change in social institutions—such as the practice of law—to technological change. The modern megafirm may be dependent on technology,<sup>270</sup> but it is a product of much more.

## IX. CONCLUSION

The pervasive power of electronic communication is breathtaking. In Egypt, for example, authorities focus their pursuit of political dissidents mainly on their blogging activities.<sup>271</sup> In London, authorities clamp down on partying on the Tube that is Internet-dependent.<sup>272</sup>

As promised, this discussion has been impressionistic, speculative, and general. I began with a vision of the legal profession resembling the world of *Michael Clayton* more and more, and sought to determine whether the central role of electronic communications in the movie portended such a development for lawyers who themselves rely heavily on electronic devices. Perhaps the electronic element of lawyering might even be responsible for the malaise portrayed by Dean Kronman.<sup>273</sup>

I conclude with a much more nuanced view. Perhaps electronic diagnostic methods, communications, and treatment portend a revolution in the medical profession,<sup>274</sup> but that does not seem imminent in

268. See, e.g., FRIEDEL, *supra* note 18, at 2 (“The story of modern technology is largely a Western one, at least to the extent that we focus on the creation of the technologies and the technological order that is now dominant throughout the world at large.”); Jill Lepore, *Our Own Devices: Does Technology Drive History?*, *NEW YORKER*, May 12, 2008, at 118.

269. For an examination of divergent attitudes toward the Western concept of “progress,” see PROGRESS: FACT OR ILLUSION?, *supra* note 63. See particularly Ali A. Mazrui, “Progress”: *Illegitimate Child of Judeo-Christian Universalism and Western Ethnocentrism—A Third World Critique*, in PROGRESS: FACT OR ILLUSION?, *supra* note 63, at 153.

270. See *supra* note 134 and accompanying text.

271. See *Price Hike Protesters Freed*, *EGYPTIAN MAIL*, June 3, 2008, at 1 (describing release of men arrested for allegedly fomenting protests at a textile plant over price hikes; one of them reported that “questioning focused mainly on his blog and his connection to other bloggers”).

272. See Paul Bracchi & Laura Moss, *Facebook Tube Party that Ended in Drunken Riot Was Organised by City Banker*, *LONDON DAILY MAIL*, June 3, 2008, available at <http://www.dailymail.co.uk/news/article-1023417/Facebook-Tube-party-ended-drunken-riot-organised-City-banker.html>. One wild party on the London Tube organized by Internet posting led to several arrests. *Id.* Bracchi and Moss see two morals to draw from the story: (1) banning alcohol from the Tube is necessary; and (2) the power of the Internet is undeniable. *Id.* “Could an event billed as no more than a good-natured get-together have been organized—and degenerated so quickly and dramatically into scenes more commonly associated with football terraces—without sites such as Facebook?” *Id.*

273. See *supra* notes 4–6 and accompanying text.

274. See *supra* notes 18–63 and accompanying text.



the legal profession. Computers will not soon supplant lawyers in providing client advice,<sup>275</sup> but the stresses of the electronic law office may be key causes of the advent of a 24/7 life for many lawyers and the resulting burnout and concern with work-life issues.<sup>276</sup> As Professors Galanter and Henderson conclude, "because of the relentless pace of modern large law firm practice, there are few (if any) partners who regard the present as a golden era."<sup>277</sup> A two-tiered profession may be emerging more forcefully, but that problem is not necessarily worsened by high-tech advances.<sup>278</sup> Our balkanized system of lawyer regulation—already under pressure—will come under more pressure due to the advent of "global" law practice enabled by electronic communications.<sup>279</sup> Other elements of lawyers' lives—the protection of the attorney-client privilege, the protection of client confidences more generally in the surveillance society, the traditional jury trial, and the traditional method of educating lawyers—may also feel stresses.<sup>280</sup>

But in the end, continuity seems to outweigh change. The legal golden age of the past seems always, on inspection, to have feet of clay. The current age, for all its difficulties, may have significant advantages over the former periods. More importantly for our purposes, it seems that although electronic means are central to current legal practice, they are only to a limited extent the cause of those aspects of practice that tempt some lawyers to despair. The Electronic Lawyer is not Michael Clayton, and need not necessarily either be a happy or unhappy lawyer.

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275. See *supra* notes 64–107 and accompanying text.

276. See *supra* notes 108–135 and accompanying text.

277. Galanter & Henderson, *supra* note 134, at 1871.

278. See *supra* notes 136–148 and accompanying text.

279. See *supra* notes 149–175 and accompanying text.

280. See *supra* notes 176–238 and accompanying text.