



## THE LEGAL MIND IN THE DIGITAL AGE

BY HON. BRUCE S. JENKINS

My mom, probably like your mom, was a fountainhead of aphorisms—you know, short gems of wisdom: “A stitch in time saves nine.” “Marry in haste and repent at leisure.” “A dollar saved is a dollar earned.” “If he fools you once, shame on him. If he fools you twice, shame on you.” On a more positive note, “the morning hours have sunshine in their mouths.” One gem that has remained with me all my life is the definition of a cynic. “A cynic,” my mother said, “is a person who knows the price of everything and the value of nothing.” That distinction between price and value embraces the whole world of economics and provides the underlying theme of what I want to say. In the midst of the electronic revolution—the greatest change since the printing press and movable type—there exists a new age of anywhere access to endless information. It is the world of the BlackBerry, the Droid, the multifunctional telephone, the PC, the Apple, the iPod, the iPad, twittering and texting, video and Skype, electronic filing, e-mail, fax, self-service and self-help, the Internet, social networks

(Facebook, Myspace, LinkedIn), online ticketing, endless menus (press one, press three), blogging, artificial speech, voice-activated GPS direction maps, PowerPoint and fast-forward buttons, YouTube, and other online applications without end. (My heavens, that is a long list, and I am just getting started). In the midst of this revolution, I want to talk about value added by you, the lawyer.

I will skip the vaunted, but tainted, billable hour (price—the scourge of law practice) and focus on the *value* of lawyering in the digital age. By the way, as an aside, the best pleadings I ever see—perfectly proofread and presented in a pleasing and understandable manner—are, of course, applications for attorneys’ fees. Would that all pleadings could be set forth with such polished perfection.

Putting it directly, in this new electronic world (which is here and won’t go away unless the power goes off, or the battery is dead), *what value are you to your client?* Of what value are your knowledge and your skills in seeking court help to solve or resolve problems your clients are

incapable of resolving for themselves? In short, *what value do you add?*

We all know the law is everywhere, and disputes arise—large and small—that need to be resolved in peace. An ordered society has rules for peaceful dispute resolution. A good lawyer often resolves matters without going to court, but on occasion, as a last resort, the courtroom is the only place to get needed help.

The role of the lawyer as peacemaker is affected by changes in the larger culture, changes such as the electronic revolution—the age of infinite information. In 2006, Baroness Susan Greenfield, a neurobiologist, warned the British House of Lords that “already the visual icon is often substituting for the written word,” and that the “sounds and sights of a fast-paced, fast-moving” screen culture may displace our ability to read and our need to remember. We are even “at risk of losing our imagination, that mysterious and special cognitive achievement that until now has always made the book so very much better than the film.”<sup>1</sup>

In barely one generation, “we have slipped away from a culture based essentially on words to one based essentially on images, or pictures.”<sup>2</sup> Recently, scholars have pointed out changes that are occurring in our culture—changes to which lawyers are by no means immune.

You are aware of the growing force of advertising legal services, which 50 years ago would have resulted in being disciplined, but which today is routine and, perhaps for some, essential. Do you know that Legalzoom, which you see advertised on television with Robert Shapiro as the designated pitchman, has sold more than one million wills? Selling legal forms with blanks for a high price is a fascinating marketing ploy. And do you know that there are now virtual law firms with websites that have contract attorneys working from home?

I talk of marketing only in passing. I am really concerned with how the technologies of the information age affect the manner in which you add value for your client—the quality of service rendered. Information technologies are intimately connected with how lawyers add value. They affect how we gather information, how we learn, how we remember, how we read, how we write, how we think, how we speak, and how we present a client’s position in the courtroom before judge or jury.

Back in 2008, *The Atlantic* published a controversial article titled, “Is Google Making Us Stupid?” The article’s tentative answer was “Yes.”<sup>3</sup> The author, Nicholas Carr, built upon the subject in a book published just this year entitled *The Shallows: What the Internet Is Doing to Our Brains*.<sup>4</sup> The book summarizes some modern-day research concerning brain functions.

It’s pretty basic stuff. A new look at the brain through magnetic imaging shows that the brain is far more plastic than scientists previously thought. The brain changes with exposure to experience. Scholars tell us that learning from a screen is about 30 percent less efficient than learning from a printed page. Indeed, we are told, “the shift from paper to screen doesn’t just change the way we navigate a piece of writing, it also influences the degree of attention

we devote to it and the depth of our immersion in it.”<sup>5</sup> But, more importantly, exposure to a screen early in life—and indeed later in life—can actually create new cerebral circuits. The brain is *physically* changed. Some say changed for better, and some for worse, but changed it is.

*The Atlantic* article quotes Maryanne Wolf, a Tufts University psychologist, who asserted that “when we read online, our ability to interpret text, to make the rich mental connections that form when we read deeply and without distraction, remains largely disengaged.”<sup>6</sup>

Scholars tell us that, through constant exposure to the screen and its endless variety of distractions and interruptions, the ever-pressing “need for speed,” immediacy, and the “efficiency” of “multitasking,” and keeping up with friends on Facebook, we are immersed in an “ecosystem of interruption technologies.”<sup>7</sup> The scholars tell us that our attention span has been reduced, our ability to concentrate and focus has been diminished, and we become more concerned with the process than with the content. Because of constant distraction—such as pop-ups, contrasting colors, advertisements, and hyperlinks—our short-term memory circuits become overloaded and we find it difficult to transform short-term to long-term memory. As a result, those who study brain function argue that our ability to conceptualize and to analyze is diminished. We find it more difficult to follow a lengthy nuanced or sustained story or an intricate or subtle argument. We tend to skim, sample, and surf, rather than read deeply and with understanding. We stay in the shallows, rather than plumb the depths. A recent headline in a Salt Lake City newspaper, the *Deseret News*, sums up the problem, “TV commercials shrink to match attention spans.”<sup>8</sup>

What we have seen and felt intuitively in this new world has now been fortified by an underpinning of research. All of this is of great moment for those of us who learn, read, write, and speak as a way of adding value in helping our clients both inside and outside of the courtroom. To gather facts with integrity, to read with understanding, to write with clarity, to think with purpose and consistency, and to speak or present information persuasively—these are the traditional tools of lawyering in court. And for the good of our clients, our culture, and our orderly democratic republic, these tools need to be preserved and, indeed, improved.

The electronic world is here to stay, and we should be aware of the dangers in the system and use the tools *as tools*, not as a substitute for what we as professionals bring to the litigation process. We have to try very hard to make sure that our electronic tools augment, rather than diminish, the value we add. Let me illustrate. Let’s say a high-priced accounting expert is on the stand. He is from New York, which means he charges big bucks—perhaps \$750 dollars an hour. When he is asked to make a simple percentage computation, he asks permission of the court to get his electronic computer, which he had left in his briefcase near his client. A fifth grader could do the math in his or her head—\$750 an hour?!

There is a difference between stored information and knowledge, just as there is a difference between proof-

reading in person and spell-checking by machine. Lots of times words are spelled correctly, but the words themselves are inappropriate. When *public* interest becomes *pubic* interest, not once but twice in a high-priced pleading, one wonders how careful the scrivener is on other things. No one ever catches the difference between *principal* and *principle*.

Access to information is not the same as *knowing*. Information is one thing, *knowledge* is quite another. Massive accumulation of information is not knowledge.

To make information your own seems elementary. We talk of facts. We talk of context. So many cases are fact-driven. We talk about what happened—for example, we ask, “Now, witness, then what happened? What did you then do?” When transmuting information into knowledge, it pays to think of a monkey’s tail. He has what is called a *prehensile* tail. It grasps. When we *apprehend* somebody, we catch the person, we embrace him, we wrap around him. When we *comprehend* something, we make it our own. Simply printing out a case for the judge’s convenience is a different kind of task than reading and comprehending the case, making the case your own, and pointing out its significance to your position. Often the Internet tempts us to do only the former, and we suffer from the illusion that a weighty argument is made so by the pound—or by the megabyte. Stacking printed cases as attachments without analysis really isn’t all that helpful.

When I think of value added, I also think of a different sense of the word—more subjective and personal. Words change with context. Take care with words. We use them, and they use us. I can’t help remembering an event in my days as a bankruptcy judge. During Lyndon Johnson’s presidency, there was a spate of courthouse building in Texas. Judges were conscious of status. Some chambers had one bathroom and some had two. You were known then in Texas as a “one-john-judge” or a “two-john-judge.” The situation was a source of bickering and controversy and an indicator of status. Arthur Moller, a bankruptcy judge who had a sense of irony and humor, presided over a case in which a business that leased portable privies filed for Chapter 11 bankruptcy. Therefore, Judge Moller had 600 portable privies under his control. He wrote the following to his chief judge: “Dear Chief, I just wanted you to know that I now have 600 Johns. So there. Sincerely, Art.”

You know from your own experience the pains, difficulties, and burdens one often meets in conducting discovery of electronically stored information. The costs can be astronomical, particularly when systems have changed and the code readers have become obsolete or have been discarded. There is no good study that I know of that deals with the shelf life of electronically stored information. What electronically stored information do you keep in anticipation of litigation?

Intense thought must be given to narrowing production requests to item-specific things. The boilerplate request for “all” could result in literally a ton of material and costs in many thousands of dollars that may, in fairness, be shifted to the requester.

Viewing a screen often seizes your mind only to scatter it—much like a windshield hit by a rock. We call it “crazed”—a good description of a person whose mind is all over the place—unfocused, unpurposed. We become “decoders of random information”—scatter-brained in spades.<sup>9</sup>

Five years ago, during a round table discussion of law practice, a local practitioner observed that “younger lawyers come in with computer, electronic, and communications skills; they’re terrific in terms of getting the client the answer right now. What you lose, however, is well-developed communication. When you hand wrote or dictated it, looked at a typed draft, and then went back through it and so on, there was a lot more thought put into it. I worry now that while we get answers back fast, we don’t get as much time to think about it.”<sup>10</sup>

Centuries ago, in talking about what it means to know something, Socrates warned of the man who is “always talking against time, hurried on by the clock,” with “no space to enlarge upon any subject he chooses,” and who thereby acquires “a tense and bitter shrewdness.”<sup>11</sup> Centuries later, Socrates may well have expressed a similar wariness of multitasking. “Heavy multitaskers are often extremely confident in their abilities,” says Clifford Nass, a professor of psychology at Stanford University. “But there’s evidence that those people are actually worse at multitasking than most people.”

Indeed, last summer Nass and two colleagues published a study that found that self-described multitaskers performed poorly on cognitive and memory tasks that involved distraction; they did much worse than did people who said they preferred to focus on single tasks. Nass and his colleagues found that chronic media multitaskers—people who spent several hours a day juggling multiple screen tasks—performed worse on analytic questions drawn from the LSAT than otherwise similar peers. Perhaps media multitaskers are easily distracted people who always would have done poorly on LSAT questions, even before the Internet. Or it may be that multitasking may actually be impairing users’ capacity for analytical reasoning.<sup>12</sup> If your mind is everywhere, your mind is nowhere. Cursory reading, distracted thinking, and superficial learning become symptoms of the high-def flat-screen age.

I have a good friend who is a brilliant scholar. He has written seven books and he often cites his earlier books in his later books. He tells me that is what makes him an expert. He tells me that if it is worth saying at all, it is worth saying more than once. Therefore, I am going to repeat in part something I said nine years ago at a Federal Bar Association seminar dealing with computers. I talked then about conversation with a computer chip, damned the mechanical nature of sentencing guidelines (the Supreme Court finally got around to adopting what our court en banc did 20 years earlier), and I praised what lawyers did to contribute to an orderly and peaceful society. I called the talk “For Thinking, Press 1. For Compassion, Press 2. For Judgment, Press 3.” This is, in part, what I then said:

A chip is part of a machine, a mechanical and electri-

cal device. It can converse, but it really can't carry on a conversation. It can record, but it can't listen. When prompted, it can replay, but it can't remember. It can count and it can calculate at lightning speed, but it cannot think. It can react as billiard balls react, but it can't respond to a cry for help, a warm embrace; nor can it respond with sympathy, empathy, horror, or judgment.

Some things are of such a nature that one cannot measure them with an ordinary scale of inches, centimeters, yards, or ounces and pounds, or the modern electronic scale of bits or bytes, or translate them into the language of zeros and ones.

Neither free speech nor the right to worship as you please is subject to mechanical measurement.

If we could measure such things with an ordinary scale, or reduce them to binary code, there would be no need for judgment.

Yet the miracle of the court system, lighted by the lamp of experience, is the weighing of such matters in the exercise of human judgment, where context is valued, where individuality is noted, and where method and rationality are used to produce a result which is accepted and abided by most.

It appears to me that in this computer age there is a subtle change in the manner in which we think and act. We forget that the computer is just a tool. It is supposed to help—not substitute for thought. It is completely indifferent to compassion. It has no moral sense. It has no sense of fairness. It can add up figures, but can't evaluate the assumptions for which the figures stand. Its judgment is no judgment at all.

If not one for thought, two for compassion, three for judgment, what do you press? You press nothing, but you tap into the reservoir of human experience, and what we have learned and continue to learn as to how we are to treat one another. After all, the federal court system is a very human institution. When you call for help you get a live operator.

Forgive me for citing myself. It is apparent to me that you must add value by gathering the facts, not inventing the facts. You add value by reading in-depth, not skimming or surfing. You add value by conceptualizing and analyzing with vigor and precision, not being content with the surface of things. You add value by writing with clarity and simplicity, not deliberately obscuring. And you add value by speaking and presenting information with persuasion—fully understanding that the best argument is a good explanation. No electronic mechanism can do those things as well as you.

My message, of course, is that while you live in the electronic world, you should use the tools that are available, but you must understand their dangers—the potential for dumbing down, for wading in the shallows, for losing concentration and focus, for multitasking to distraction, for mistaking endless information for organized knowledge, and for failing to take time to *think*.

Thinking is hard work. Making things simple is hard

work. The best law office software is your own well-framed mind. Tools can calculate. Human beings *think*; human beings *know*; human beings *comprehend*; and human beings make *judgments*. There is no algorithm for human judgment. There is no mechanical substitute for thought. The value you add, *the legal mind*, is entirely up to you. **TFL**

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<sup>1</sup>680 PARL. DEB., H.L. (5th ser.) (2006) 1219–20 (U.K.) (Baroness Greenfield), available at [www.publications.parliament.uk/pa/ld200506/ldhansrd/vo060420/text/60420-18.htm#60420-18\\_head0](http://www.publications.parliament.uk/pa/ld200506/ldhansrd/vo060420/text/60420-18.htm#60420-18_head0).

<sup>2</sup>Jackie Ashley, *New Technology May Be Changing the Human Brain*, THE GUARDIAN (U.K.) (April 24, 2006), available at [www.guardian.co.uk/commentisfree/2006/apr/24/comment.television](http://www.guardian.co.uk/commentisfree/2006/apr/24/comment.television).

<sup>3</sup>Nicholas Carr, *Is Google Making Us Stupid?*, THE ATLANTIC (July-Aug. 2008), available at [www.theatlantic.com/magazine/archive/2008/07/is-google-making-us-stupid/6868/](http://www.theatlantic.com/magazine/archive/2008/07/is-google-making-us-stupid/6868/).

<sup>4</sup>Nicholas Carr, *THE SHALLOWS: WHAT THE INTERNET IS DOING TO OUR BRAINS* (W.W. Norton & Company 2010).

<sup>5</sup>*Id.* at 90 (quoting Anne Mangen, *Hypertext Fiction Reading: Haptics and Immersion*, 31 J. RES. READING 404, 404–419 (2008)).

<sup>6</sup>Carr, *supra* note 3.

<sup>7</sup>*Id.* at 91 (quoting Cory Doctorow, *Writing in the Age of Distraction*, LOCUS MAGAZINE (Jan. 2009), available at [www.locusmag.com/Features/2009/01/cory-doctorow-writing-in-age-of.html](http://www.locusmag.com/Features/2009/01/cory-doctorow-writing-in-age-of.html)).

<sup>8</sup>Emily Fredrix, *TV Commercials Shrink to Match Attention Spans*, DESERET NEWS, A10 (Oct. 28, 2010).

<sup>9</sup>Carr, *supra* note 4, at 122 (quoting Maryanne Wolf, Interview with Maryanne Wolf, Psychologist, Tufts University (March 28, 2008)).

<sup>10</sup>*Industry Outlook: Law Firms*, UTAH BUSINESS, 80–81 (June 2005).

<sup>11</sup>Plato, *Theaetetus*, THE COLLECTED DIALOGUES OF PLATO, Edith Hamilton and Huntington Cairns eds., F.M. Cornford trans., 878 (Princeton University Press 1963).

<sup>12</sup>David Glenn, *Divided Attention*, THE CHRONICLE OF HIGHER EDUCATION (THE CHRONICLE REVIEW) (Feb. 28, 2010), available at [www.chronicle.com/article/Scholars-Turn-Their-Attention/63746/](http://www.chronicle.com/article/Scholars-Turn-Their-Attention/63746/).