LEGAL WRITING FOR THE RE-WIRED BRAIN

ROBERT B. DUBOSE
rdubose@adtappellate.com
Alexander Dubose & Townsend, LLP
1844 Harvard Street
Houston, Texas 77008
713-523-2358
713-522-4553 (fax)

State Bar of Texas
23RD ANNUAL
ADVANCED REAL ESTATE DRAFTING
March 1-2, 2012
Irving

CHAPTER 16

ROBERT DUBOSE

ALEXANDER, DUBOSE & TOWNSEND, LLP
1844 Harvard Street
Houston, Texas 77008
(713) 523-2358
rdubose@adtappellate.com

Robert Dubose is a partner in the Houston office of the appellate boutique, Alexander Dubose & Townsend LLP. From 1998 to 2010 he was an adjunct professor at the University of Houston Law Center where he taught *Appellate Advocacy*. He is a frequent speaker and writer on advocacy and legal writing.

Robert graduated from Rice University (B.A. 1990) and Harvard Law School (J.D. 1993). He is Board Certified by the Texas Board of Legal Specialization in Civil Appellate Law, and is a past chair of the Appellate Section of the Houston Bar Association. He is listed under Appellate Law in the current editions of Texas Super Lawyers® and The Best Lawyers in America®.

Robert is the author of the book, *Legal Writing for the Rewired Brain: Persuading Readers in a Paperless World* (American Lawyer Media 2010). He is a co-author of the Texas chapter of *The Insider's Guide to State and Federal Appellate Courts* (American Bar Association, pending publication 2012). He also is a contributing author for the non-legal books, *Houston It's Worth It: Ike* (ttweak 2009) and *Fearless Critic Houston Restaurant Guide 2010* (Fearless Critic Media 2009).

TABLE OF CONTENTS

LEGAL WRITING FOR THE RE-WIRED BRAIN

I. INTRODUCTION: OUR BRAINS ARE BEING RE-WIRED.

Something big is happening. Our brains are being re-wired.

It has been happening for the last 15 to 20 years. It happens whenever we read in a computer environment rather than reading on paper. And the pace is accelerating.

Computers bring us more information, faster. As a result, when we read in a computer environment, the way we read changes. We study the text less. We stop lingering over words. Instead, we begin skimming the text rather than reading line by line. We engage in rapid information gathering. Computer users' eyes move vertically up and down the page, looking rapidly for structure. And the more we read on computer screens, the more difficult it becomes to read focus on and study long texts.

Although computers have been part of most law practices since the 1980s, it is only within the past decade that most lawyers and business people have begun to do most of their reading on screens, instead of paper. And it is only within the last few years that many courts have begun to access legal briefs on screens instead of paper.

This paper examines legal writing in a paperless world. It argues four points:

- **Technology has dramatically changed our reading environment.** Over the past 20 years, the reading and working environment for lawyers and their clients has changed significantly. We have begun to do more of our work, our communication, and our reading within a computer environment. The computer has become much more than a tool within the office; it has become the office itself.

- **The new reading environment is re-wiring our brains and changing the way we read.** Reading on computer changes the way we read. The way our eyes move changes. The way our brain processes information changes. The habits and needs of a screen reader are very different from a paper reader.

- **Legal drafters must adapt to the new style of reading in order to communicate.** Most legal documents are designed for the old reading environment. If we want communicate information to re-wired readers, we are going to have to change the way we write.

- **The best tools for adapting to the new reader come from research on web usability**. To write for re-wired readers, the best techniques will not be found in books of style, form, or grammar. Instead, they will be found in the lessons of web-usability research. This paper will suggest specific tools based on usability research to write for screen readers.

This is an updated version of a CLE paper that I first presented in 2009. In 2010, I published a much longer book on the same topic. LEGAL WRITING FOR THE REWIRED BRAIN: PERSUADING READERS IN A PAPERLESS WORLD (Texas Lawyer Books 2010). The book explores in greater depth (1) the reasons why technology is changing our reading, and (2) specific advice for legal writers writing to our changing audience.

When I first presented this topic in 2009, changes in reading habits were well known to web designers, but not the general public. Since then, these changes have been discussed in the wider press, including numerous articles in the *New York Times*. *See, e.g.*, Jonah Lehrer, *Our Cluttered Minds*, N.Y. TIMES, June 3, 2010, at BR22; Matt Richtel, *Your Brain on Computers: Attached to Technology and Paying a Price*, N.Y. TIMES, June 6, 2010, at A1; Tara Parker-Pope, *An Ugly Toll of Technology: Impatience and Forgetfulness*, N.Y. TIMES, June 6, 2010 at A13. A number of books also have been published on the topic. *See, e.g.*, NICHOLAS CARR, THE SHALLOWS: WHAT THE INTERNET IS DOING TO OUR BRAINS (2010). This paper addresses what these changes mean for lawyers who are in the job of communication and persuasion.

II. TECHNOLOGY IS CHANGING OUR READING ENVIRONMENT.

The environment in which lawyers read and work has changed dramatically in the last 20 years. Consider the differences between the legal office of 20 years ago versus the legal office of today.

A. 20 years ago, almost all reading was from paper.

In the late 1980s, few lawyers used computers at their desks. Lawyers communicated by phone and letters. They drafted by hand, or more often, dictation. They read everything – letters, contracts, legal research – on paper or in books.

Many law offices had computers. But they were primarily tools used by staff for word processing and accounting. They were not the means for our communication or information gathering. Tools such as the Internet and e-mail were not available in most law offices until the 1990s.

Yet a new use of computers was on the horizon for lawyers. By the late 1980s, some law firms had one or

two Westlaw or Lexis terminals. Lawyers in large firms could sign up to use the terminals, which were devoted solely to research. The terminals were connected to the database by modem, not through the Internet.

Even by 1990, the law office was very different from today's office. Lawyers did not gather information on the Internet. They did not communicate by e-mail. Lawyers did very little reading on-screen. The computer was, for the most part, a replacement for the typewriter and the calculator, a tool used by secretaries, but not lawyers.

B. Today: the law office is going paperless.

Since 1990, technology has completely changed lawyers' work habits. We read and work electronically. We research primarily by computer. We draft by computer. Most of us do most of our reading on computer. And we communicate by computer. We even carry small electronic devices with us outside the office, making ourselves available to read e-mails from their miniature screens 24 hours a day.

As an illustration, consider how much time you spend reading on paper versus screens for these types of reading:

- **Communications**. Do you send and receive more communications by letter or e-mail?

- **Drafting**. When you draft and edit, are you reading and working on paper or on a computer?

- **Cases and research**. Do you read cases printed on paper or on a computer screen?

- **News**. Do you read a printed newspaper or news on the Internet?

- **Pleasure reading**. Do you spend more time reading books and magazines on paper or reading on the Internet?

I have been posing these questions to groups of lawyers over the past year. Of those groups, 75% to 90% of the lawyers have said that they now spend more time reading from screens than paper.

I also read mostly from screens. My computer has two monitors. I usually leave open at least five different windows. At any one moment, I might have open a collection of texts – my e-mail in-box, a scanned document, some cases on Westlaw, a blog about a new Supreme Court decision, and the document I am drafting. My cursor, and my eye, jump from one screen to the next.

Even when I am out of the office, I remain connected to screens. I read e-mails on a Blackberry, and news on my home computer.

I am not alone. Like many firms, my office is becoming paperless. We stopped purchasing reporters, relying almost exclusively on Westlaw for research. When we receive documents, we scan them into a searchable PDF document. We rely less on physical files than the files of scanned documents on computer. The lawyers rarely send letters. E-mail is so much easier and faster.

The allure of technology is hard to resist. No one wants to return to the world before computers. Legal documents were much harder to prepare with dictation and typewriters. A change in the "final" draft could require re-typing dozens of pages. It is just as hard to imagine research before Westlaw and Lexis. We had to rely on case summaries, digests, and our own memory of cases. Communication required letters and messengers or phone calls.

My dependance on technology was driven home when Hurricane Ike struck Houston. My home and office were without power for 5 days and Internet for 7 days. I could communicate by phone. I could go to my office to work on paper. Yet all the work I needed to do *required* a computer and an Internet connection.

After several days, I found a shopping mall with power and free wi-fi Internet access. For a few days, the food court became my office. Although I was distracted by children playing and bad music, the mall offered the one thing that was absolutely essential for me to work – the Internet connection.

It is hardly an exaggeration to say that the computer has become the office in which we work. If most lawyers were forced to choose between working in their physical office, or working on a computer, most would choose the computer. It has become almost impossible to practice law without one.

C. Clients also are going paperless.

Of course, lawyers are not the only profession doing more screen reading. Our corporate and business clients also have started reading more on screens than paper.

Computers have been commonplace in offices for several decades. When computers were first introduced to offices, many predicted that the American office would become paperless. For instance, a 1975 Business Week article suggested that by 1990 "most record-handling will be electronic. *The Office of the Future,* Business Week (June 30, 1975).

But it took several decades for computers to begin to replace paper. When computers were first introduced to offices, the immediate effect actually was to *increase* paper usage. Global consumption of paper doubled between 1980 and 2000. *Technological Comebacks: Not Dead, Just Resting,* Economist (Oct. 9, 2008). Analysts suggests that paper use expanded for several reasons.

First, printing technology made it cheaper to print. *Id*. Second, computers increased the amount of information available to be printed. *Id*.

More importantly, it was years before readers became accustomed to doing most of their reading on screens instead of paper. Even at the beginning of the 2000s, surveys suggested that most people still did most reading from paper instead of screens. Abigail J. Sellen and Richard H. R. Harper, *The Myth of the Paperless Office* 81 (2003).

It is only within the last decade that our culture has begun to switch from preferring paper reading to screen reading. In the last decade, the American office has finally started to rely less on paper. Between 2000 and 2008, the paper usage per white-collar American worker has declined significantly. *Id*.

Reading habits have changed as well. My informal surveys of lawyers indicate that more than 75 percent of lawyers are spending more than half of their reading time on screens instead of papers.

The most significant sign of our paperless future is our primary form of communication – e-mail. E-mail has largely replaced letters sent by mail. By 2007, computer users sent 35 trillion e-mail messages. John Freeman, *The Tyranny of E-Mail* 4 (2009). Your experience may be like mine. It is hard to remember the last physical letter I received from a client. When a client chooses to communicate by letter instead of e-mail, most lawyers would be surprised – if not worried.

After years of using computers, the American office is finally more comfortable storing, and using, information from a computer. *What Ever Happened to the Paperless Office?*, The Christian Science Monitor (December 12, 2005). As our clients have adapted to reading screens, they need less paper.

D. 5 key features of the new working environment are changing the way we read.

This wide-scale shift from paper-reading to screen-reading has consequences. Throughout the history of man, the use of new media tools has changed the thinking and habits of the tool user.

Consider the massive changes that occurred in Europe after the introduction of the printing press. Before the press, literacy was largely confined to specialists – monks, clergy, and academics. Written manuscripts were usually read aloud in public settings. But the press resulted in widespread literacy. It resulted in a shift to private reading. It also coincided with the spread of Protestantism and the divergence of science from religion.

The shift from reading printed books to computer screens may result in the same sort of widespread impact. "Reading a book is not perfectly equivalent to reading a screen, no matter what the text." Alberto Manguel, *The Library at Night*, 79 (2006).

A computer reading environment is different from a printed reading environment if 5 key respects.

1. <u>The Internet is a constant source of information, entertainment, and distraction</u>.

Inside a computer reading environment, we have a limitless supply of information, nearly as big as the collected body of human knowledge. "The volume of full text information that can be searched, browsed and printed from . . . [a] desktop machine is now almost unimaginable." UNIVERSITY COLLEGE OF LONDON, INFORMATION BEHAVIOUR OF THE RESEARCHER OF THE FUTURE 8 (Jan 11, 2008), http://www.jisc.ac.uk/media/documents/programmes/reppres/gg_final_keynote_11012008.pdf.

The Internet has not only increased the *availability* of information, it has created more information. In a paper world, there were significant barriers to publishing. It was expensive to publish a book. Publishers chose which texts would be published, and which would not, thus screening and limiting the dissemination of information.

Today, anyone with an Internet connection can publish on the web at no costs. Millions of Americans have their own blogs or Facebook accounts, which makes them their own private publishers. As a result, the amount of information available increases dramatically every day.

For the computer user, this information is available with a few mouse clicks. The Internet is informative, entertaining, and distracting.

2. <u>Search engines cause us to expect information quickly, without thought</u>.

Search engines like Google give us access to the limitless information available on the Internet. They provide information instantaneously. And because searches are easy to formulate, they require very little thinking to find information. *See* Nicholas Carr, *Is Google Making Us Stupid?*, ATLANTIC MONTHLY, July/August 2008, available at http://www.theatlantic.com/doc/200807/google.

As a result readers have begun to expect the same qualities in other sources of information. When they approach a document, they expect to locate the necessary information in it as quick and easily as they locate information through a Google search.

Computerized legal research has created the same expectation. Twenty years ago, most of us researched cases in the digest. We had to start with the broad picture of the law. Only by understanding broad legal principles, and the map of the law as reflected in the digest's table of contents, could we then follow the headnotes to find specific reported decisions that were governing

precedent.

Computerized research now takes us to the specific precedent immediately. By inputting three or four words to describe our issues, Westlaw brings us to specific sentences in the cases that use the word most frequently. This experience causes most new researches to conclude that they have found the one or two sentences that state "the law."

Legal researchers, like Google researchers, have come to expect to find the answer in a matter of seconds, without working too hard to find it.

3. Screens are difficult to read and encourage skimming.

Computer screens are more difficult to read than paper. Studies show that, when we read word-for-word, we read 10 to 30 percent more slowly on screens than paper. Sri H. Kurniawan & Panayiotis Zaphiris, *Reading Online or on Paper: Which is Faster?*, August 2001, http://users.soe.ucsc.edu/~srikur/files/HCII_reading.pdf.

What makes a screen harder to read? John Freeman suggests that the difference has to do with light. Freeman, *supra* page 3, at 15. Before computers, humans always read by reflected light. Our eyes are designed to see reflected light, rather than looking directly at a light source, such as the sun. We see most of the world using reflected light. The exception is when we look into an electronic device. A computer screen shines light directly into our eyes. *Id*. It causes dried eyes, an increased blink rate, and headaches. *Id*.

It is no surprise that readers compensate for the more difficult screen environment by skimming text to gather information more quickly.

4. Windows lets a reader open multiple screens at once – with each screen competing for the reader's attention.

Windows-based operating systems were an advance over DOS because they allowed users to run multiple programs and processes at one time. Today, we take the ability of operating systems to multitask for granted. It allows a user to open dozens of screens, and work in them, all at the same time.

Our traditional image of the reader is a person studying a single book. In contrast, Windows allows readers to have a dozen books open in front of them. It creates more competition between texts for readers' attention – and more opportunities for readers to be distracted.

5. E-mail results in fast communication and frequent distractions.

E-mail has become our primary way to communicate. With mobile devices, e-mail follows us, distracting us from whatever we are doing. One survey found that 64 percent of Americans check e-mail when on vacation. Freeman, *supra* page 3, at 134. Another survey found that 67 percent check e-mail in bed. *Id*. The same survey found that half of the respondents believed they were addicted to e-mail. *Id*.

When we read in a computer environment, the distraction caused by e-mail is even worse. When a new message arrives, e-mail programs are designed to interrupt our thought with notification sounds and pop-ups. It takes the average reader 64 seconds to recover from these e-mail interruptions. Thomas Jackson, et al., *The Cost of Email Interruption* 5 (2001), http://km.lboro.ac.uk/iii/ pdf/JOSIT% 202001.pdf.

The result of constant e-mail notifications – and pressure to respond to e-mails quickly – is to prevent us from having extended periods of contemplation and focus. As John Freeman concludes, "We work in the most distraction-prone workplace in the history of mankind." Freeman, *supra* page 3, at 140.

III. THE WAY WE READ IS CHANGING.

When Europeans first began to use the printing press, the way they read changed. The press allowed for fast production of longer texts. In greatly increased the number of books that people could read.

The availability of more texts encouraged more literacy and more reading. The kind of reading that emerged was a solitary study of books – what technology writer Nicholas Carr refers to as deep reading. Carr, *supra* page 3.

Today, as we move away from books and toward reading in a computer environment, the way we read and think is changing. Our brains are being re-wired.

Carr noticed these changes in his own reading habits. As he found himself read more on computer screens and less on paper, something happened to his mind:

> I have had an uncomfortable sense that someone, or something, has been tinkering with my brain, remapping the neural circuitry, reprogramming the memory. . . .

Carr, *supra* page 3. He was losing the ability to focus and concentrate:

> [What the Net seems to be doing is chipping away at my capacity for concentration and contemplation.

Id. In contrast to book reading, reading on computer screens promotes a style of reading that emphasizes efficiency and immediacy. *Id*. It is very different from the type of deep reading people do when they spend more time reading printed texts.

By the end of 2008, I became aware that my own reading style was changing. I was doing up to 80 or 90 percent of my reading on a computer screen. With the switch to screens, I noticed a number of changes in my reading habits:

> •**I had difficulty reading long texts.** Once an avid reader, I found that I rarely finished a book or newspaper article. My focus and interest waned after a few pages.
>
> •**I was skimming, not reading**. I noticed that I rarely read any text line-by-line. Instead, I had developed a habit of skimming – grabbing bits of information from a page, without reading the whole page.
>
> •**I had problems concentrating**. As I worked, I was easily distracted by e-mails or news on the Internet. At times, I would have to leave my desk and sit in a room without computers to accomplish important tasks that required focus and complex thought.

These changes not only affected the way I read, but the type texts I wanted to read. I came to appreciate short and simple texts. For pleasure reading, I sought out brief snippets of information on blogs and websites, instead of reading longer books.

Studies demonstrate that this experience is not unusual. The way most people read has changed as a result of reading on computers.

A. The screen reader does not read; she skims.

When reading on a screen instead of paper, most readers skim. Screen readers do not read word-by-word, line-by-line. They move through a text rapidly, trying to gather information without reading the entire text.

The best example of this phenomena is shown by **eye-tracking studies**. These studies use video cameras to track eye movements of readers as they read online.

Eye-tracking studies demonstrate that screen readers scan the page in an F-shaped pattern. Jacob Nielsen, *F-Shaped Pattern for Reading Web Content*, Jakob Nielsen's Alertbox, April 17, 2006, http:// www.useit.com/alertbox/reading_pattern.html. Most readers first read a few lines across the top of the page. Then they read headers, or first sentences, after a break in a text further down the page. Finally, readers' eyes scan down the left side of the text in a vertical movement. *Id*. The F-pattern looks something like this:

Id. The areas where users look most are red; users look less in yellow areas; users view blue areas least; and no users view gray areas. *Id.*

The most important lesson of the F-pattern is that screen readers usually do not read thoroughly. In the study, almost none of the readers read all of the words on the screen. When words are located toward the end of a paragraph, further down the page, or further to the right, a reader is less likely to read them. *See id.*

Another illustration of skimming is the problem of online libraries. Since Project Gutenberg began in 1971, various organizations have attempted to make a wide range of books available online in huge digital libraries.

The problem is that few people have the patience to read library books on a screen.

The aversion to long texts is shown by a study of readers' use of a British Library website. When the library studied how readers used academic texts online, it found few readers read them thoroughly. Instead, readers (1) exhibited "a form of skimming activity," (2) hopped from one source to another, and (3) read no more than one or two pages before bouncing to another website. University College of London, *supra* page 3, at 10.

As the British Library study summed up this phenomenon:

> It is clear that [computer] users are not reading online in the traditional sense; indeed there are signs that new forms of 'reading' are emerging as users 'power browse' horizontally through tiles, contents pages and abstracts going for quick wins. It almost seems that they go online to avoid reading in the traditional sense.

Id. at 10.

This switch to skimming or "power browsing" results from the nature of the computer reading environment. First, computer readers are in a hurry. Steve Krug, *Don't Make Me Think*, 22 (2d ed., 2006). They readers have a lot of information available to them on the computer, and not enough time to read it all.

Second, it is harder to read line-by-line on a screen. This may explain why screen reading is slower than paper reading. *See* Kurniawan & Zaphiris, *supra* page 4.

Skimming may sound lazy, even ignorant. Yet it is a necessary tool our minds have developed to handle the information explosion and the demands of screen reading. Web users try to grab information rapidly so they can move on to gather other information. On a computer screen, the competition for a reader's attention is fierce.

B. Screen readers do not read in the order we expect them to read.

Most legal writers assume that readers will read our writing in the order we intend – in a linear fashion from the beginning to the end of the text. Yet the screen reader takes a very different approach.

Studies of screen readers show that they do not read web pages in a linear fashion. Smashing Magazine, 10 Principles of Effective Web Design, Jan. 31, 2008, http://www.smashingmagazine.com/2008/01/31/10-principles-of-effective-web-design/. Instead of reading from start to finish, web users' eyes jump around the page, rather than reading across each line.

Steve Krug also notes that web users rarely choose the best option for finding information quickly. Krug, *supra* page 5, at 24. Instead, they "satisfice" – choosing the first reasonable option that might lead them to the information they want. *Id*. Users satisfice because they are in a hurry to get information, and because there usually is no penalty in guessing the wrong way to get it. *Id*. at 25.

For the legal writer, the challenge is to make important information so easy to locate and read that the reader cannot miss it. Even if the reader jumps around to different parts of the document rather than reading straight through, the writer must ensure that the reader does not miss the most important parts.

C. The screen reader is impatient and wants information quickly.

"Web users are impatient and insist on instant gratification." Smashing Magazine, *supra* page 6. The reason for this impatience is simple. Life is too short and the Internet gives us too much to read. A legal document may find it difficult to compete with the Internet for a readers' attention.

Screen reader habits such as skimming and satisficing are reflections of the reader's impatience. The user wants information quickly and easily. The reader is frustrated when a text slows the reader, or requires the reader to think unnecessarily.

The reader's impatience creates another challenge for legal writers. A long and complex legal document may take hours to read and fully absorb. The drafter must enable impatient readers to get the point of the contract in a matter of minutes. An impatient reader may not spend much more time than that.

D. The screen reader does not want to think to get information.

Steve Krug's landmark book on web design is named for the key principle for writing to the new reader: *Don't Make Me Think*. *See* Krug, *supra* page 5. Krug explains that when a user looks at a web page:

> [I]t should be self-evident. Obvious. Self-explanatory. I should be able to "get it" – what it is and how to use it – without expending any effort thinking about it.

Id. at 11.

The point is not that readers are unintelligent. We should never treat readers as incapable of thinking. Rather, they are busy and impatient. They want to get the point as quickly as possible with the least amount of effort.

This principle applies to legal writing just as it applies to web design. The goal is to persuade the reader who does not want to spend much time and much mental effort in reading your document.

There are a number of ways in which a legal document can frustrate a reader. It may be difficult for the reader to locate the information she need in a document because it is not well labeled. Or a reader might have to read a complex sentence several times before understanding it because the structure is not clear. Or the document may not spell out its meaning clearly. A contract provision may be ambiguous, failing to spell out clearly the consequences of particular actions.

E. An illustration of the re-wired reader.

An exchange with one of my partners reminded me of the difference between the old-style reader and the re-wired reader. We had been exchanging e-mails about another lawyer, who referred to himself "humble." My partner said the lawyer was like Uriah Heep.

I had heard of Uriah Heep. I assumed he was a literary character. But I did not know the reference.

I Googled "uriah heep humble." Within 10 seconds, I found a web page explaining that Heep was a character in Dickens' David Copperfield, who repeatedly claimed to be "umble."

Before the Internet, I would not have located this information so quickly. I might have had to ask some friends. Or I might have taken a long trip to the library. With Google, I could "get" the reference in a matter of seconds.

Yet the depth of my understanding through Google did not match the speed. I could not fully understand the rich humor of the reference because I had not read David Copperfield. Unlike my law partner, I had not spent hours absorbed in the novel, *living* with Uriah Heep. And because I spend so much time reading online, I am

unlikely to read David Copperfield anytime soon.

Google and power surfing give us access to much more information, more quickly, but with less depth. As Carr argues, on the Internet it is harder to experience the process of *discovery* that we get when reading a book. *Carr*, *supra* p. 3.

The new readers are not the deep reader from the era of books. They do not want to be immersed in our writing. They do not want to spend hours pouring over a legal document to absorb it fully.

New readers want the point. They want it quickly. And they do not want to have to work hard to get it.

IV. USABILITY RESEARCH HELPS US WRITE TO THE 21ST CENTURY READER.

The bad news is that our writing must change. The changes in our reading habits make traditional legal writing extremely difficult to use. Yet traditional legal writing continues. Over the past 20 years, the form and style of legal writing has changed very little. If anything, the widespread use of word processing has made the average legal document longer and more complex. To be able to communicate with the re-wired reader, lawyers must adapt to the new reading environment by changing the way they write legal documents.

The good news is we have a large body of research about how to write for the new style of reading. This research comes from the school of web design known as **usability**.

A. Why usability helps legal writers.

Usability is the study of how to make web sites easy to read. Research into usability has been well-funded. As demonstrated by the success stories of Google and Amazon, the usability of a company's website can make the difference between failure and success. For this reason, the field of usability has resulted in more research than ever before about the way people read.

I first encountered usability research when I was designing content for my own website – a blog about Houston restaurants and food. As I began to apply usability tools, I had more site visitors. As the size of my text shrunk, I found that readers actually stayed *longer* on my site.

Usability tools are also useful for readers of legal documents. These tools can make a document easier to read. And they make it easier to get the point quickly. These tools also focus readers on the most important parts of document, so they understand the most important information.

B. 6 usability tools for legal writers.

The following are 6 usability principles that are essential in writing to the new style of reader. Although designed for the new screen reader, they are not counterproductive for the paper reader. They make the legal document easier to use, both for the re-wired reader – and even for traditional readers.

1. Enable skimming.

Imagine a client who needs to understand the point of a long legal document in 15 minutes. Even if you have a 50-page document, it is possible to enable her to skim and understand the important provisions without requiring her to read the entire text. If you enable skimming, the client will understand the contract. If you do not enable skimming, she will understand little about from that 15 minutes of reading.

How do we enable skimming? Research into the F-pattern suggests that skimmers focus on the content that appears in particular places on a page. *See supra* at 5. For a legal writer, the best way to emphasize important content is to make use of text features such as:

1. Headers that summarize provisions;

2. Easy-to-grasp structure that allow readers to understand how the different parts of the document fit together.

3. Using topic sentences – the first sentences of paragraphs to summarize the essence of a paragraph.

Of these tools, the most important is the header. Studies show that one of the first things web readers look at on a page is the headers. *See* Christina Laun, *Scientific Web Design: 23 Actionable Lessons from Eye-Tracking Studies*, Virtual Hosting, Nov. 13, 2007, http://www.virtualhosting.com/blog/2007/scientific-web-design-23-actionable-lessons-from-eye-tracking-studies/.

The headers in a legal document should summarize the text that follows. Ideally, a skimmer should be able to read only your headers and get the point of the document. To enable skimming, drafters should place the essence of key provisions in headers. The remainder of the text is for elaboration and clarification.

On a more detailed level, key information should appear in the first sentences of paragraphs. Readers are more likely to read the first sentence than the remainder of the paragraph, which should be for elaboration and detail.

Skimmers also skim down the left side of the page to find structure. *Id*. To perceive structure, skimmers use cues such as:

1. Bullet points - suggest a listing of support or examples;

2. Numbered lists - suggest a purposefully ordered

list of support or examples; and

3. Outlines - suggest the relationship between primary and secondary steps in the logic of the document.

In particular, usability studies show that a reader's attention is attracted by lists. Lists make a site easier to skim, and easier for users to find the information they need. *Id*.

An illustration of the power of lists can be found in popular magazines. Articles have titles such as, "10 Ways to Get Great Abs." Without the list format, a long discussion of ways to improve abs might be tedious. The list makes it easier to process.

An effective legal document uses this sort of structural cue to break up long paragraphs into easily skimmed parts. And it enables the skimmer to quickly see the relationship between provisions and to understand the document's logic.

2. Omit ~~needless~~ words.

In the mid-20th Century, Strunk & White advised readers to "omit needless words." William Strunk Jr. & E.B. White, *The Elements of Style* 23 (3d ed. 1979). For the 21st Century reader, Steve Krug simplifies this advice: "omit words." Krug, *supra* page 5, at 45.

The difference is a matter of degree. The re-wired reader only absorbs so many words. They need to read the most important words.

Paradoxically, when I shortened the posts on my blog, I found that average reading time *increased*. In other words, as I wrote less, readers spent more time reading.

Krug suggests editing drafts of web pages by cutting half of all words. *Id*. at 45. This makes the useful content more prominent. And it reduces the level of "noise" on the page. *Id*.

The importance of brevity for the new reader is demonstrated by Twitter. Twitter is a social networking site that prohibits messages longer than 140 characters and spaces. That is the equivalent of one or two short sentences.

Twitter is in tune with the demands of the new reader. It requires messages to be brief because readers want short bits of information.

Of course, legal documents will never be as short as a Twitter message. But legal writers can learn from Twitter how to cut words and still provide the same information.

3. Don't force your reader to do extra work.

An effective legal document conveys information to readers without requiring them to work hard to process the information. That does not mean documents should condescend to readers or treat them as unintelligent. Legal readers are intelligent. But our documents should not require them to do unnecessary work.

As an illustration, these are just a few things legal writers can do to make documents easier to read.

Make the logical structure intuitive. Usability teaches that a web site's architecture should be intuitive to the user. SMASHING MAGAZINE, *supra* p. 4. Similarly, the structure of a legal document should be intuitively apparent. We accomplish this with tools, such as outlines and headings that allow readers to perceive structure quickly. In longer documents, a table of contents can serve as a summary of the document that shows the different levels of structure.

Avoid synonyms. Synonyms require readers to think unnecessarily. Consider a legal document that refers to the "district court," the "lower court," and the "trial court." All of these synonyms may refer to the same court, but readers must to do some extra thinking to realize that the phrases mean the same thing. A legal text is easier to follow when it repeatedly uses the same words for the same things.

5. Use white space.

White space is any blank part of a page. Robert Hoekman, Jr., *Designing the Obvious: A Common Sense Approach to Web Application Design*, 214 (2007). Usability studies have demonstrated that white space has a great effect on how much a user enjoys reading a page. *Id*.

This makes sense. White space gives our eyes and brain a rest. It is a pause.

Writing Professor George Gopen explains that readers must summon certain a certain amount of energy to begin to read any sentence or paragraph. George D. Gopen, *Expectations: Teaching Writing from the Reader's Perspective* 19 (2004). Gopen compares this energy to taking in a breath. *Id*.

This helps explain why unnecessarily long or complex sentences and paragraphs are hard to read. The brain needs a rest between thoughts. If the sentence or paragraph requires too much work to read, the reader runs out of breath.

This problem is amplified in a computer reading environment. Reading from a screen is difficult – more difficult than reading from paper. Readers prefer even more frequent breaks between paragraphs than they do when reading from paper.

Eyetracking studies show that people spend more time actually reading shorter paragraphs than longer paragraphs. Steve Outing and Laura Ruel, *The Best of Eyetrack III: What We Saw When We Looked Through Their Eyes*, http://poynterextra.org/eyetrack2004/main.htm. Short paragraphs receive twice the overall eye fixations as longer ones. *Id*.

Large, uninterrupted blocks of text can push a reader to skimming, or to stop reading. The problem is the lack of white space. To stay fresh, readers need something like a chapter break at least every few pages. In a contract, this can be achieved by a new header that separates one section of the contract from another. Readers also need frequent paragraph breaks – at least every one-third of a page. And readers appreciate a short sentence.

6. Put the most important content in the top left of the page.

The F-pattern of web reading suggests that readers' eyes gravitate to the top left of a page. *See* Nielsen, *supra* page 5. Readers are far less likely to read content toward the bottom right side of a page. Rather, their eyes tend to skim the lower portions of a page seeking something to grab their attention. Outing and Ruel, *supra* p. 8.

For legal writers, this means that important headers, such as the beginning of a new section, should appear toward the top of a page when possible. If a new section falls toward the bottom of a page, the writer should insert a page break, leave a space at the bottom of the page, and start the new section on the next page.

V. CONCLUSION: A GLIMPSE INTO THE FUTURE.

The legal document of the future is likely to be a different medium than the legal document of the past. As we move to electronic storage and screen reading, the format and style of legal documents will change.

If all work is done on computer screens, legal documents may start to be structured more like websites. The single continuous text may be replaced by multiple screens for each part and subpart of a contract or other document.

The size of legal documents also may shrink. Although word processing technology has enabled the mass-production of longer documents, re-wired legal readers will demand shorter documents.

For successful lawyers, this type of legal document will require more time and thought to write. As any editor knows, it takes more time to make a text shorter. Lawyers will have to spend more time distilling necessary information to its essence – in a form that can be read on a screen.