

“How screen technologies could dumb-down reading.” by Nicholas Carr
author of *The Shallows: What the Internet is Doing to Our Brains*

Look closely at what you're reading right now. See those little spaces between the words? They may look unimportant, but the invention of word spaces, back in the Middle Ages, changed the course of culture.

For the first couple of thousand years after people began writing, they didn't bother separating one word from the next. Long lines of letters ran together across the length of the scroll or the page. Reading in those days was a trial. Your brain cranked away as you tried to decipher where one word ended and the next began. No one read silently. To decipher a word, you had to say it out loud.

When an anonymous scribe started putting spaces between words, around the year 800, everything changed. Reading became much easier, and you could do it silently. No longer taxed, your brain could devote itself to the interpretation of text. Deep, solitary reading was born, and with it, media historians like Walter Ong have argued, came a richer consciousness.

The revolution culminated with the invention of the printing press in the 15th century. As books became cheaper and more plentiful, deep reading moved out of the monastery and university and into the mainstream. Not everyone read novels, poems and other literary works, but a great many people did, and the book took its place at the very center of culture. The human mind became not only literate but also literary.

Today, a counterrevolution is under way. As the computer and cell phone become our main reading devices, the book is being pushed to the periphery of culture. According to recent studies by Ball State University and the federal government, the average American spends more than eight hours a day peering into a screen - TV, computer or cell phone (sometimes all three at once) - but devotes just 20 minutes to reading books and other printed works.

Reading from a screen is very different from reading from a book. A book provides a shield against distraction, allowing us to focus our entire attention on an author's narrative or argument. When text is put onto a screen, it enters what the science fiction writer Cory Doctorow terms an "ecosystem of interruption technologies." The words have to compete for our attention with links, e-mails, texts, tweets, Facebook updates, videos, ads and all the other visual stimuli that pour through our computers.

In a very real sense, screen reading is returning us to that distant time when there were no spaces between words. Reading is again becoming a cognitively strenuous job as the mind struggles to keep track not only of the words but also of all the surrounding distractions. The best our overloaded brains can do is skim and scan.

Maryanne Wolf, a developmental psychologist at Tufts University and an expert on the neuroscience of reading, notes that learning to read deeply is a painstaking process, requiring changes deep in our brains. She worries that the shift from immersive page-based reading to distracted screen-based reading could impede the development of the specialized neural circuits that make richly interpretive reading possible. We might turn back into mere "decoders" of text.

Some bibliophiles believe that the growing popularity of e-books could stem this tide. By

putting whole books onto screens, it's argued, we'll be able to devote our full attention to them once again. We'll see a renaissance of reading.

That seems, unfortunately, like wishful thinking. It's true that some of today's digital reading devices, such as Amazon's Kindle, do a pretty good job of replicating the printed page. Many avid readers have found the Kindle an enormous convenience, allowing them to carry a library with them wherever they go.

But the drift of computerized gadgets is always toward distraction. If current technological trends hold, e-book reading will soon be accompanied by all the attention-sapping interruptions common to other computing tasks. The e-reading software on Apple's multimedia iPad is elegant and, like the Kindle, provides a calmer reading experience than is usually found on the Web. But it's just one app among many, and Apple will soon add multitasking capabilities to the device. Amazon, too, is adding new features to the Kindle and plans to open an app store for the gadget.

Publishers, for their part, are eagerly exploring ways to add links, videos and even social networking functions to e-books to spur sales. Such features might bring the ancient book into the modern media age, but they also will further remove us from the profound intellectual engagement of deep reading.

Search for a book on Google, and you'll get a good sense of where we're heading. You'll be brought to a virtual page of text, but it will be surrounded by icons, images, ads and a welter of links. In adding a new cut-and-paste tool to Google's book service in 2007, a company executive crowed that books would now be able to "live an even more exciting life."

It's hard to complain about such tools. They are useful. But do we really want our books to lead more exciting lives? The original genius of the book, as a technology, was its profound lack of excitement. On a printed page, there's nothing going on other than words, sentences and paragraphs. The excitement of reading a book lies in our own minds as we get lost in a moving story or wrapped up in brilliant argument.

As the lives of books get more exciting, we might discover that our own intellectual lives get a little duller.