

Coach Thyself: Peak Intellect?

You've heard of "peak oil," no doubt. That's where the amount of oil we can easily extract from the planet begins an inexorable decline. Is it real? Have we reached that point? Pundits and experts trade arguments about this. But suppose I told you there's another argument heating up, and that it's not oil that's in question. Though it's hard to imagine things too much more fundamental to our civilization than major energy sources, this argument is about something actually more important. What might be slipping into an inexorable decline in nothing less than our smarts. Are we losing the reflective, creative intelligence of the human species.

What!? Don't be silly, you say. Why, our brains, augmented now by the Internet, search engines, e-books, and the like—they've got to be better than ever. Well, no, sorry. Though you won't see it highlighted on TV or your popular web pages, the evidence is pouring in. Searchable, hyperlinked, interactive, multimedia-enhanced text, instead of augmenting our powers of intelligence, is diminishing them. Careful, sustained, focused reading and thinking are in steep decline—especially if you take the younger generational cohorts into account. "Peak intellect," as strange as it may sound, is quite likely already a reality.

Nick Carr's *The Shallows—What the Internet is Doing to our Brains* is a rich, readable compendium. It outlines fascinating history of books and reading, explains recent brain imaging studies, and makes astute observations on the cultural effects of a wired world. He gives credit to technology where it is due—indeed, wherever he can. But the preponderance of the research he cites is distressing to say the least.

If, for example, the Web is living up to its promise, then one thing you would certainly expect is that professional

scholars and scientists would be using the newer, searchable, online journal articles to gather more relevant information for their own thinking and writing. Yet in analyzing the citations in no less than 34 million research articles written between 1945 and 2005, a sociologist found just the opposite. As more and more scholarly journals went online, fewer and fewer references appeared in their articles. Even as older issues of journals were digitized, the trend persisted. Scholars cited really only a few of the most recent.

Search engines, it turns out, favor always what is newest. They rank the hits they return in such a way as to establish and amplify a quick, superficial consensus about what is important. In the pre-web days, researchers apparently spread their own print-based reading net wider—instead of letting the questionable algorithms of Google or Bing channel their reading. Google, you should know, makes its money from "clicks-thru's." So it does not actually want browsers to spend much time on any given page.

Even more striking, however, are the various studies Carr reviews that compare reading comprehension and retention of simple print texts versus that of "richer," interactive, hyperlinked, even video enhanced web pages. Everything from eye movements to brain imaging demonstrates that "content enriched" web pages function as an interruption and distraction. Two groups, for instance, were asked to compare two research articles. One read plain text and the other saw text with links back and forth between the articles. These links were supposed to help. They didn't. Even without distracting ads blinking on the page, the hyperlinked group tested significantly worse.

What's going on is that the transfer of ideas into our long-term memories, and thus their integration into our "knowledge," is being short-circuited in

the hyperlinked text by a part of the forebrain that has to take over and make decisions. To click or not to click?

To go back after the click, or follow other links onward? How many windows am I keeping track of now? You can actually see this activity in the neural images. Quite simply, those with less distraction and fewer choices absorb and understand better.

Maggie Jackson, in *Distracted—The Erosion of Attention and the Coming Dark Age*, does have a chapter on efforts to use computers to train people in better attention and focus. She speaks of either a new "dark age," or else a computer-aided "renaissance of attention." Meanwhile, teenage girls in Japan are writing novels composed entirely of text messages, because "longer sentences are too hard to understand." And you can see for yourself how much impact attention-training is getting on the web.

Perhaps the most interesting positive news (from Carr) is this. After a half an hour walk in the woods, as compared to a half an hour walk downtown, people test seriously better at reading and thinking. And this brings us back to those other practices, like yoga and meditation, which are perhaps the best "training of focus and attention." My coaching question from all this is—what would happen if you thought twice about that glittering distraction machine on your screens. Good science suggests that the simple print page is already an optimal technology for growing your internal knowledge base. At the rate we're going, we may well teach computers to think, not "like us," but rather "like we used to ourselves." ▲

