Is google making us stupid? essay sample

Business, Company



"Dave, stop. Stop Dave. Will you stop, Dave?" So the supercomputer HAL pleads with astronaut Dave Bowman in a famous scene toward the end of Stanley Kubrick's 2001: A Space Odyssey. Dave Bowman, having nearly been sent to a deep-space death by the malfunctioning machine, is calmly, coldly disconnecting the memory circuits that control its artificial brain. "Dave, my brain is going," HAL says forlornly. "I can feel it. I can feel it." I can feel it, too. Over the past few years, I've had the uncomfortable sense that someone, or something, has been tinkering with my brain, remapping the neural circuitry, reprogramming the memory. My mind isn't going, so far as I can tell, but it's changing. I'm not thinking the way I used to think.

I can feel it most strongly when I'm reading. Immersing myself in a book or a lengthy article used to be easy. My mind would get caught up in the narrative or the various arguments, and I'd spend hours strolling through long pages of prose. That's rarely the case anymore. Now my concentration starts to drift after two or three pages. I get fidgety, lose the train of thought, begin looking for something else to do. I feel as if I'm always dragging my distracted brain back to the text. The deep reading that used to come naturally has become a struggle.

I think I know what's going on. For more than a decade now, I've been spending a lot of time online, surfing and searching the great databases of the Internet. I'm researching, reading and writing e-mails, scanning headlines and blog posts, watching videos and listening to podcasts, or just tripping from link to link to link. For me, as for others, the Net is becoming the universal medium, the source for most of the information that flows

through my eyes and into my mind. The advantage of having such an incredibly rich source of information is great, but it comes at a price.

As the media theorist Marshall McLuhan pointed out, media are not just passive channels of information; they supply the raw material of thought, but they also shape the process of thought. And what the Net seems to be doing is chipping away my capacity for concentration and contemplation. My mind now expects to take in information the way the Net distributes it: in a swiftly moving stream of particles. Once I was a scuba diver in a sea of text. Now I zip along the surface like a guy on a Jet Ski. Many of my friends say they are having similar experiences fighting to stay focused on long pieces of writing. One blogger, a lit major in college, wrote that he had stopped reading books altogether. "What happened?" he asked. "What if I do all my reading on the Web, "not so much because of the way I read has changed, but because the way I think has changed."

Another blogger also described how the Internet has altered his mental habits. "I've lost the ability to read long articles on the Web or in print. My thinking has taken on a "staccato" quality, which reflects the way I quickly scan short passages of text from many sources online. I can't read War and Peace anymore. I've lost the ability to do that. Even a blog post of three or four paragraphs is too much to absorb. I skim it." Scholars at University College London found that most people using two popular research sites exhibited "a form of skimming activity," hopping from one source to another. They typically read no more than one or two pages from an article or book before they "bounce" out to another site. Their conclusion: "Users

are not reading online in the traditional sense; new forms of reading are emerging as users "power browse" for quick wins. It almost seems that they go online to avoid reading in the traditional sense.

Thanks to the Internet and text-messaging on cell phones, we may well be reading more today than previous generations, when television was our medium of choice. "However, we are not only what we read," says

Maryanne Wolf, a developmental psychologist at Tufts University. "We are how we read." She states that practicing the craft of reading plays an important part in shaping the neural circuits inside our brain. The neural circuits created by our use of the Net will be different from those created by our reading of books and other printed works. She further argues that our ability to interpret text, to make rich mental connections that form when we read deeply without distraction, is lost to the reading style promoted by the Net. The human brain is almost infinitely malleable. "Neural cells routinely break old connections and form new ones," states James Olds, a neuroscientist at George Mason University. "The brain has the ability to reprogram itself, altering the way it functions."

The mechanical clock, which came into use in the 14th Century, provides a compelling example. The clock separated time from human events, creating a belief in a world of divided time of mathematically measurable moments. The clock helped to bring into being the scientific mind and the scientific man, but it also took something away. This new world became a poorer version of the old reality. In deciding when to work, to eat, to rise, we stopped listening to our senses and started obeying the clock. When the

mechanical clock arrived, people began thinking of their brains as operating "like clockwork." Today, in the age of software, we come to think of them as operating "like computers." Neuroscience tells us that the change, or adaptation, also occurs on the biological level. We also begin to take on the qualities of this new technology. The Internet promises to have a farreaching effect on our thinking processes. As an immeasurably powerful computing system, the Net is incorporating most of the other "intellectual technologies.

It's becoming our map and our clock, our calculator and our telephone, and our radio and TV. The Internet absorbs a medium and injects and surrounds the content with hyperlinks, blinking ads, and other digital devices. A new email message, for instance, may announce its arrival as we're glancing over the latest headlines at a newspaper's site. The result is to scatter our attention and weaken our concentration. The Net's influence doesn't end at the edge of a computer screen, either. As people's minds become attuned to the crazy guilt of Internet media, traditional media have to adapt to the new expectations. Television programs add text crawls and pop-up ads, and magazines and newspapers shorten their articles, introduce capsule summaries, and crowd their pages with easy-to-browse info-snippets. Old media have little choice but to play by the new-media rules. Never has a communications system played so many roles in our lives—or exerted such broad influence over our thoughts—as the Internet does today. Yet, for all that's been written about the Net, there's been little consideration of how, exactly, it's reprogramming us.

In the late 19th Century, the clock was embraced by systems analysts and manufacturers, seeking maximum speed, maximum efficiency, and maximum output in factories. This new programming of workers resulted in the altering of all acts of labor. And now, computer engineers and software coders are profoundly influencing our intellectual lives. The Internet is a machine designed for the efficient and automated collection, transmission, and manipulation of information, and its legions of programmers are intent on finding the "one best method" to carry out every mental movement we might make on the Net to acquire knowledge.

Google has declared that its mission is " to organize the world's information and make it universally accessible and useful." Drawing on massive amounts of behavioral data it collects through its search engine and other sites, it carries out thousands of experiments a day, and it uses the results to refine programming language that increasingly controls how people find information and extract meaning from it. In Google's view, information is a kind of commodity, a resource that can be mined and processed with industrial efficiency. According to this line of thought, the more data we can "access" and the faster we can extract its essentials, the more productive we are as thinkers. Where does it end?

Sergey Brin and Larry Page, the founders of Google, speak frequently of their desire to turn their search engine into an artificial intelligence, a HAL-like machine that might connect directly to our brains. "For us, working on search engines is a way to work on artificial intelligence," Page said a few years back. In a 2004 interview Brin said, "Certainly if you had all the

world's information directly attached to your brain, or an artificial brain that was smarter than your brain, you'd be better off." In 2007, Page told a convention of scientists that Google is " really trying to build artificial intelligence and do it on a large scale."

Their easy assumption that we'd all "be better off" if our brains were supplemented, or even replaced, by an artificial intelligence, is unsettling. It suggests a belief that intelligence is the output of a mechanical process, a series of discreet steps that can be isolated, measured, and optimized. In Google's world, the world we enter when we go online, there's little place for fuzziness or contemplation. Doubtfulness is not an opening for insight but a bug to be fixed. The human brain is just an outdated computer that needs a faster processor and a bigger hard drive.

The idea that our minds should operate as high-speed data-processing machines is also the Internet's controlling business model as well. The faster we surf across the Web, the links we click and the pages we view—the more opportunities Google and other companies gain to collect information about us and to feed us advertisements. Most of the proprietors of the commercial Internet have a financial stake in collecting the crumbs we leave behind as we jump from link to link—the more crumbs, the better. The last thing these companies want is to encourage leisurely reading or slow concentrated thought. It's in their economic interest to drive us to distraction.

The kind of deep reading that a sequence of printed pages promotes is valuable not just for the knowledge we acquire from the author's words but for the intellectual vibrations those words set off within our own minds. In the

quiet spaces opened up by the sustained, undistracted reading of a book, we make our own associations, draw our own inferences and analogies, and foster our own ideas. Deep reading, as Maryanne Wolf argues, is indistinguishable from deep thinking.

If we lose those those quiet spaces, or fill them up with "content," we will sacrifice something important not only in ourselves but in our culture. In a recent essay, the playwright Richard Foreman eloquently described what's at stake: "I see within us all the replacement of articulate personality, of complex inner density with a new kind of self— evolving under the pressure of information overload and the technology of the instantly available. As we are drained of our inner life of dense cultural inheritance, we risk turning into "pancake people"—spread wide and thin as we connect with the vast network of information accessed with the touch of a button."

I'm haunted by that scene in 2001. What makes it so poignant, and so weird, is the computer's emotional response to the disassembly of its mind: "I can feel it. I can feel it. I'm afraid." HAL's outpouring of feeling contrasts with the lack of emotion that characterizes the human figures in the film, who go about their business with an almost robotic computerlike efficiency. In the world of 2001, people have become so machinelike that the most human character turns out to be a machine. That's the essence of Kubrick's dark prophesy: as we come to rely on computers to clarify our understanding of the world, it is our own intelligence that flattens into artificial intelligence.