Taking a byte into books

Spring reading list of high-tech tomes has some fresh, interesting offerings / **Simson L. Garfinkel**

MOST POPULAR books about computers in recent years have either been pedantic and somewhat technical tomes that tried to teach about bits and bytes, or else they've been quasi-academic volumes written by philosophers and cultural anthropologists who understood people but lacked an understanding of anything technical.
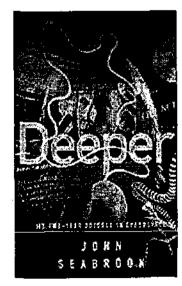
Thankfully, times are changing. This spring we're seeing a flurry of books that look at the deeper issues brought on by information technology.

Here's my spring reading list:

Can gorillas and monkeys think the way humans do? Will computers ever be capable of consciousness? These are the two questions that James Trefil poses – and mostly answers – in his masterful book "Are We Unique?" Casting a wide net, Trefil shares with readers some of the most recent research in neurology, evolution, primate research, computer science, and philosophy.

"Are We Unique?" never talks down to the reader. Instead, Trefil's prose is lively and engaging, presumably similar to all-night beer sessions at George Mason University, where he teaches physics. In this book's 14 chapters, Trefil constructs his answer to the Question of Consciousness: Can humans build a computer that is self-aware? To reach his conclusion, Trefil presents the arguments and counter-arguments that have surrounded this question for close to 50 years. He ultimately concludes that while it may be possible to build a thinking machine, it will have a different kind of intelligence and thought than humans do.

One of the most interesting things about the scientific debate over consciousness and artificial intelligence, writes Trefil, is that

John Seabrook's "Deeper" delves into his experiences in cyberspace.

it's a debate that's been largely carried out in books and articles in the popular press.

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John Seabrook, a journalist living in Manhattan, came to the on-line world like many others. One day he got a disk from Compuserve and inserted it into his Powerbook. He signed up for an account. He started sending his first e-mail messages. But where you or I might send e-mail to our coworkers or friends, Seabrook was corresponding with Microsoft chairman Bill Gates.

Seabrook wrote about his e-mail experience with Gates in New Yorker magazine – and was immediately flamed by two journalists working on Gates's biography.

The power of the experience convinced Seabrook to go deeper into the rapidly expanding on-line world. Over the next two years, Seabrook tried everything: joining mailing lists, posting on Usenet, hosting a forum on the Well (a snobbish Bay Area on-line community), creating a home page, and even cybersex. He pretended to be a woman. He met his cyberspace friends in "meat space." He alienated his wife. And he became very technically savvy.

The result is "Deeper: My Two Year Odyssey in Cyberspace," a witty and philosophical account that, for many, will recreate the magic of the first year on line.

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"Data Smog" addresses the single biggest threat facing computer users today: information glut. Author David Shenk shows why it is human nature to want more and more information – and how this thirst is causing many of us to slowly drown.

Shenk's premise is a simple one: As the cost of delivering information goes down, we get more of it. Although computers, faxes, e-mail, radio, broadcast TV, cable and satellite-TV can keep up with the raising tide of data, the human can't. Faced with the flood, our thinking becomes fragmented, our attention spans shrink, and the quality of what we create drops precipitously.

I'm a great fan of this book. "Data Smog" is the Silent Spring for the Digital Age. What is needed now is for our lawmakers to pick up this book and implement David Shenk's pie-in-the-sky legislative agenda, which would help stamp-out spam mail, prohibit government and companies from using information for unauthorized purposes, and help us craft a sensible technology policy.

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The book that bites off a little more than it can chew is "What Will Be," Michael Dertouzos's rumination on the future. From his privileged position as director of MIT's laboratory for computer science, Dertouzos has mapped out the direction that information technology is likely to take our society over the next generation. It's sure to be a rocky path.

Unlike many of his contemporaries, Dertouzos is very even-handed in his treatment of technology. He tells of a future in which medical experts around the country will be electronically convened to cure each person's sicknesses and where computers will work with us, rather than against us.

But he also tells about the increased terrorism and violence that the new technology will bring. Backing up this vision are stories from Dertouzos's own curious life and his own personal brand of technological deterministic philosophy.

Next week I'll be reporting on my and my readers' experiences with hand-held computers. Got a story to share? Please send it to plugged-in@simson.net.

Reading list

"Are We Unique? A Scientist Explores the Science of the Human Mind" by James Trefil (George Mason ...)

"Deeper: ..." (Simson & ...)

... MIT Laboratory for ... Bill Gates (HarperCollins ...)