The SEARCHER'S Voice

Miracles on the March

I'M NOT SUPERSTITIOUS BY NATURE, but superstitions can sneak past my defenses now and then. My greatest vulnerability to superstition comes when I have invented the superstition all on my own—pet superstitions, you could call them. They usually come from watching for patterns, linking observations that extend across a lifetime. For example, I have almost come to believe that any prospect that truly fascinates humanity, that captures its imagination, that builds its own legend will ultimately come to pass. Sometimes you can see the obvious connections—for example, the first atomic submarine being named the *Nautilus* in keeping with Jules Verne's imaginary submarine in *Twenty Thousand Leagues Under the Sea*. Verne's *Around the World in 80 Days* was more vision than imagination, but the attractive notion of slashing away at the time it takes to travel vast distances has led to achievements from Lindbergh to supersonic transports. And then there's the *Star Trek* show. Out of all the nerds who toiled to produce the technological advances behind smartphones, I'll bet 60% or more of them could register as official Trekkies.

Dream it. Then do it. And for how many years have sci-fi books, articles, films, etc. shown a world where computers can think and act? Well, I guess we all know what's coming next. Watson. His appearance on *JEOPARDY!* was only the beginning. Have you seen the commercial where Watson lords its achievements over Ken Jennings, *JEOPARDY!*'s all-time human performer (youtube.com/watch?v=lszB8muRqQAZ)?

The name Watson has a certain magic to it. Thomas Adolphus Watson helped Alexander Graham Bell build the first telephone. The first words ever heard over a telephone were, "Mr. Watson—come here. I want to see you." Then there's Thomas J. Watson, the first president of IBM, and the man after whom IBM's leading research center is named. That may be the origin of the computing Watson's name within IBM. However, perhaps those pioneering in the field of cognitive computing, should consider another Watson-ian connection—one with a more human-friendly aspect.

And "human-friendly" is a real issue. Of all those sci-fi renditions of the rise of future computers, at least half—maybe more—show those new mechanical beings as no friend of carbon-based life-forms—like us. Some of the futurist computers come as enemy robots but HAL 9000 in *2001: A Space Odyssey* was just a soft, soothing voice and a big red eye urging Dave to his doom. Funny. Now that I think about it, Watson's ad voice sounds a bit like HAL's, rather more sweet than sly, but close.

Many people fear computers, although fewer do now that practically everyone has one. Pew Research Center recently reported that some 20% of Americans categorize their computer interactions as being "online almost all the time." But the fear is still there. Will it take my job? Will it expose my secrets and strip away my privacy? Will it guide villains to prey upon me? Even, will it someday rule me? And these fears can inhibit human acceptance of all the flood

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of good that cognitive computing could offer. And there will always be a certain reality to some of those fears. Anything with strength has power, and power is always a double-edged sword.

And anyone—even Watson—can make a mistake. After all, at the unveiling of Watson's strengths to the world in the *JEOPARDY!* competition with the two top human *JEOPARDY!* performers, Watson still failed the Final JEOPARDY! challenge —the subject was U.S. airports—and failed it dismally. Of course, by then Watson was so far ahead, it didn't matter how horribly it did in the Final JEOPARDY! round. On the other hand, think about it. Would you want to receive medical advice—as so often mentioned in pro-Watson commercials—from a thinking machine that put down "Toronto" as its final answer? (Apparently Watson hasn't been dating Dora the Explorer.)

To get past any latent and not-so-latent resistance to Watson or other cognitive computing systems, the best approach might be to focus on making Watson seem kind and devoted, a valet of the mind, always ready to accommodate and assist its human master, a sidekick, in fact. And who better fits that image than John Watson, the partner of Sherlock Holmes?

What would Watson have to offer individuals, in such a context? Think about it. Wouldn't it be lovely to have a lifelong, birth-to-earth, all-seeing, all-remembering companion, but one who served only its owner? It could grind away in the background looking for events, products, services, people who could improve your life. It would bring any information you might need or just want on a whim to your side instantly. It could guard your wallet by comparison shopping automatically. It could investigate the background of people entering your life. It could guarantee your fiscal affairs would be well managed. And, as time went on and you had developed a lifelong habit of relying on it, old age would hold less fears of any term of memory loss. And if, occasionally, it would make one of its all-too-computer-y gaffes, one no human would make like misplacing Canada, well, what's a little bumble between friends? After all, Sherlock may have borne a deep affection for his friend, but John Watson had his faults, endearing though he was.

One of the greatest sci-fi authors laid down the rules that could guarantee humanity's acceptance of emerging computers. Isaac Asimov's "Three Laws of Robotics" set the path:

> First Law: "A robot may not injure a human being or, through inaction, allow a human being to come to harm."
>
> Second Law: "A robot must obey orders given it by human beings except where such orders would conflict with the First Law."
>
> Third Law: "A robot must protect its own existence as long as such protection does not conflict with the First or Second Law."

Clearly not all computers or devices enabled by computers—drones come to mind—follow these laws. But if cognitive computing systems such as Watson are to march into the future with a minimum of opposition, their creators and marketers would do well to keep them in mind.

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