OBLIQUE PERSPECTIVE
Unwitting Victims of Technology?

By John H. Wharton

"Your brain is just like any other muscle in your body. You gotta use it or you'll lose it."
— Radio ad for *Jeopardy* game show

Last Halloween I had a series of run-ins with local sales people. At the time I blamed it on bad luck, but now I wonder if we haven't all become the unwitting victims of some cosmic technological trick-or-treat.

True-Life Horror Stories

It all started at breakfast. The restaurant bill came to $9.56. I gave the waitress $20.56. She rang up the sale and handed me my change: $41.00. Startled, I asked, "What's this?"

"Your change, sir." She smiled pleasantly.

"How much did I gave you?"

"A twenty and some coins. Why?"

"And this is the right change?" She turned and checked the bright blue display of her computerized cash register, which showed "Amount Due: $41.00."

"Yes sir," she said. "That's right."

I wanted to help her save face. "Do you often give people back more change than what they gave you to start with?" (I thought of the old movie short *The Absent-Minded Waiter*, in which Steve Martin habitually piles excess change on his obliging customers.)

"No..." she frowned, "that *is* odd..."

While she reviewed the cash register audit tape, I added the change amount to the original bill and commented, "You must have punched in that I'd given you $50.56."

A moment later she looked up, astonished. "My God! You're right!" she said, as though I'd predicted her error by magic. I made a mental note henceforth not to confuse clerks with loose change, and to save coins for vending machines.

After work, I stopped at a video store to rent the Rolling Stones documentary *Gimme Shelter* for a college film class. The clerk greeted me and offered to help.

"Have you got *Gimme Shelter*?" I asked.

"Sure do. Just put it out myself."

I couldn't find the tape, but the clerk stopped me from leaving. "No luck?" he inquired. "Where did you look?" (Was this a trick question? Can some of his patrons not spell?)

"I checked the entire 'G' section."

"No wonder," he replied. "That tape's shelved with the S's."

"What?" I asked. "Why put *Gimme Shelter* with the S's?" ("*Shelter*, Gimme"? "*Stones*, Rolling"?)

"That's just where it goes — always has. I stock the shelves, and I know." He led me to the "S" rack, and pointed to a gap between two tapes. "It was right there this morning. Must be out."

I left, confused. A video dealer in the next town keeps their inventory on a computer, and the prospect of dealing with a computerized data base suddenly seemed appealing. I telephoned the second store.

"Hi, this is Teri, can I help you?"

"Yes, could you check whether *Gimme Shelter* is in stock?"

"*Gimme Shelter*? What's that?"

"An old documentary about a Rolling Stones tour."

A moment later she responded. "I don't see it. We've got *The Rolling Stones*, *The Rolling Stones in the Park*, and *The Rolling Stones/Spend the Night*. Could it be one of them?"

"No..., no, it's called *Gimme Shelter*" I repeated. Something seemed amiss. "Are you by any chance looking under *R*?"

"Yes," she said. "Rock videos are all under the artist's name."

"This isn't a rock video, it's a feature-length film."

"Still, that's where the computer would file it."

"The computer wouldn't *know* it's a rock film. It's called *Gimme Shelter*, with a G. Would you please check the G section?"

"It wouldn't be there, sir. That's not how the computer works. You can come see for yourself, but I have other customers here. Have a nice day!" *Click*.

I wanted to meet the computer that infers subject matter and cast from a film's title, so I drove to the store, borrowed the catalog, found the title (under G), and asked for Teri. "I called earlier. I wanted to show you that *Gimme Shelter* is listed under G."

"*Whoa!*" she said, shocked. "That's weird. Thanks — I'll make sure it gets fixed."

I left, with the tape, dismayed. It was getting dark, and hordes of children were roaming the streets. (This was all still Halloween.) On the way home I stopped at a convenience store and asked the clerk for some quick, cheap trick-or-treat candy. She suggested 5¢ Tootsie Rolls: "Aisle 3, left side, bottom bin."

I counted out 100 pieces, dashed to the counter, and slapped down five dollars. "I'm in a rush. There's 100 pieces here. Is there tax on candy?"

"No," she said, so I gathered my stash and started to leave.

"WAIT!!!" she shouted. "I've got to count it!" The clerk flattened the pile, arranged the pieces, got flustered, and stopped. "I can't count that good," she explained. I offered to help; she declined. "I've got to do it myself. They take inventory tomorrow." (One must be especially careful the last day of each month, it appears, since inventory is taken on the first.)

We seemed at an impasse, but the clerk brightened. "Maybe the boy in the stock room can count!" (I'm not making this up.) She disappeared and re-emerged with the boy. "We're in luck!"

It took another six minutes, with other customers waiting, for the "convenience store" workers to count the candy and complete this minor sale. As I left, the stock boy told the clerk, "Next time, just ring up one sale, and then hit the 'tally' button as you bag each piece. The machine counts for you." (Cash registers today think of everything.) The clerk seemed visibly relieved that she never would have to master this pesky "counting" business.

A Tale of Two Revolutions

What's going on here? It's a cop-out to bemoan the declining quality of service. These people weren't stupid. Each was friendly and unfailingly polite, and each clearly wanted to be helpful. I suspect the waitress had made change correctly for years before smart cash registers took over, and the video and convenience store clerks seemed to know every item on their shelves.

When muscles aren't used they atrophy; I wonder if idle brains also shrink. For years there's been talk of how the "computer revolution" would bring myriad benefits to society. Perhaps we've missed a critical point. Maybe the revolution is over. The computers won. Society lost.

Intel says microcomputers are spawning a "second industrial revolution." The first revolution occurred when machinery took over dull, repetitive manual labor, relieving factory workers of drudgery and leaving more free time for leisure activities. The second revolution, in Intel's scenario, will happen as computerized robots and smart appliances take over dull, repetitive mental labor, leaving service workers time for more humanistic endeavors.

Intel's view of the future is hardly original. In his 1952 book *Player Piano*, Kurt Vonnegut portrays American life after what he also calls the "second industrial revolution." His premise starts out like Intel's, but Vonnegut recognized that revolutions sometimes backfire. The machinery that replaced manual labor inadvertently gave workers the freedom to turn fat and lazy. When machines begin thinking for us, Vonnegut feared, we may all turn dumb.

Certainly some of Vonnegut's fears have been real-

ized. The natural order of things — human domination of machines — has inverted; more and more service-sector jobs exist primarily to service machines. Computers sort inventory lists; bar-code wands read product labels; point-of-sale terminals retrieve prices, total the bill, and compute change. Humans just bundle the goods, collect the cash, and handle the charge-cards. Clerks no longer have to add, subtract, alphabetize, or spell; in time they forget how. A mind is a terrible thing to waste, but it's easier to set your mind in neutral and coast than it is to second-guess the machines.

(Vonnegut also observed that revolution sometimes breeds counter-revolution. During the first industrial revolution a fellow named Ned Ludd inspired a band of concerned mill-workers to sabotage mechanized looms in an effort to save their jobs. Automation may inspire similar rebellion against computers. Perhaps the video clerk shelves his tapes with an inscrutable filing system in order to keep himself in the loop: customers must contact him to find what they need.)

Was Henny Penny Ahead of Her Time?

I'm not against progress. It's human nature to build tools and exploit them. Pocket calculators let us forget how to do long division or compute square roots by hand. Students in Keasi, Fiji, a village with no plumbing or electricity, 59 km from the nearest road, use solar-powered calculators to do their homework.

It's also human nature, in time, to become dependent on those tools. Gordon Moore told a group of Stanford students last December that it didn't bother him if schools stopped teaching long division, "just as long as there's at least one expert, somewhere in the world, who knows the long division algorithms."

No doubt stone age parents worried that by learning to cast metal, their high-tech offspring would forget how to flake the edges of flint cutting tools. In this day and age, do people really need to know how to do long division, or how to subtract, or spell, or count? Maybe not. But there's a qualitative difference between tools that save labor and those that supplant mental skills.

Even if you don't know how it works, you can still use an electric drill or drive a car and appreciate what the machine is doing for you. But the microcomputers embedded within cash registers and bar-code readers don't just simplify a worker's job, they also seem to eliminate his motivation to understand the functions performed by the machine.

Critical thinking is vital to all aspects of life. If we lose our basic thinking skills, the effects may be profound. A clerk who doesn't notice whether the amount of change she returns to a customer is more or less than what was tendered can hardly be expected to cope with the other complexities of today's high-tech society. ♦