UNCATEGORIZED

The Write Stuff

In Which the Author Worries: Can I Be Replaced?

By Steve Ditlea

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My earliest memory of obsolescence was the sudden disappearance of Alfred, the Maltese-born elevator man in the small Manhattan loft building where my father's firm made plastic business novelties. One day, when I was eight and visiting my dad's office (always a treat because I could pound away on his industrial-strength typewriter and fantasize about a writer's life), the elevator was out of commission and Alfred was no longer around. It took three months before an automatic elevator was running, but Alfred would never return.

He was supplanted by buttons on a control panel and relays behind a rudimentary computing system that couldn't replace Alfred's extra-elevator skills as a daytime watchman, neighborhood information resource, and thoroughbred racing tout extraordinaire. After he was gone, there were thefts in the building as well as frequent breakdowns of the automated elevator, but never any talk of bringing Alfred back.

One morning five years ago a story on the front page of The Wall Street Journal gave me the shock of my life. I got from it that computer software was about to make my profession obsolete, that I was to suffer the same fate as Alfred and the other elevator operators whose work has disappeared. I was in a panic.

My profession consists of writing about technology for periodicals in print and online. (All right, it's not strictly a profession — I didn't have to do graduate study for it and I'm not licensed by the state, like dentists and beauticians.) My colleagues and I are hardly as visible as political journalists or business writers — nor, thankfully, as reviled. There are maybe a few hundred of us practicing technology journalism full time, either on staff or as freelancers, like myself. Without our experience, communications skills and dedication to accuracy, the publication you are reading and others like it would have a hard time filling their pages. And yet here we were about to be turned into computer-fodder by the very technology we covered — or so I sensed nervously between the bytes.

The Journal story, by staff reporter William Bulkeley, was ostensibly about sports journalism. Running in the "A-head" position, the paper's central column usually reserved for offbeat topics, it had a wry tone. "Semi-Prose, Perhaps, but Sportswriting by Software Is a Hit" the headline read. Added the subhead: "Reporters Sometimes Sacked, Aren't So Gleeful; Would Grantland Rice Be Fired?"

The article, appearing on March 29, 1994, detailed how a $100 PC program had replaced a $1,500-a-month sports writer at a weekly newspaper in Humphrey, Neb. This software, called Sportswriter, took reports of scores and quotes from coaches of high school football and basketball games; once the information was keyed in by a typist, the computer would spew out serviceable prose relating the outcome of the game, complete with sports cliches like "knotted" scores or teams that "jump in front." The program's author, Roger Helms, was said to be looking beyond sports. The story concluded with a quote from Helms: "A virtual TV weatherperson would be a natural — you could create an image you couldn't tell from a real person."

Not being able to tell a computer's output from a real person is the criterion by which computers could be deemed intelligent, according to the famed test English mathematician Alan Turing proposed more than 50 years ago. In Turing's text-based scheme (when graphics were still far off in the future) if a real-time teletyped dialogue misled a human into thinking that the unseen party at the other end was another human, the computer could be said to be intelligent. The jury is still out on whether some artificial intelligence (AI) program can actually fool most adults into thinking it's human-even though medical diagnostic and other expert knowledge-based systems have proven more accurate than the flesh-and-blood professionals on which they were modeled. For Sportswriter, the level of writing was described as "a little below the level of a beginning reporter," but that was enough to displace high school stringers and at least one staff reporter.

So how long before I became obsolete as a result of some Technologywriter program, capable of digesting a press release, searching the Net for related reports, and dumping out at least a trade-press-worthy story, which got the facts right — and didn't take off for lunches? My career options were limited: perhaps public relations, that sold-out refuge for reporters from which few ever return to journalism, or driving a cab (and how long before those jobs were automated out of existence?). The fear haunted me. I expected to open Wired one day and find that all its writers had been replaced by bots (bots are autonomous software search agents that surf the Net to find items of interest to readers), avatars and other software creations (not that it doesn't already read that way, at times). Or I would glance at the top left-hand corner of The New York Times and see the paper's motto had been changed to "All the News That's Fit to Process."

The idea is hardly far-fetched. The Journal story itself cited computer-generated stock-market summaries at the Bloomberg financial news service and customized newsletters culled from thousands of online sources by a Cambridge, Mass.-based startup firm, now defunct. I have obsessively kept track of other computer threats in the making. I followed the work of the MIT Media Lab's News in the Future research consortium under its director Walter Bender-especially in the area of customized news, with the student-personalized Fish Wrap electronic newspaper and geographically-aware PLUM (Peace Love and Understanding Machine) software bringing a local perspective to news stories about natural disasters around the world. I also learned of Columbia University computer science professor Kathy McKeown's Columbia Digital News System, providing summaries of stories from live news sources, with a specialized capability for analyzing reports on terrorist activities. Closer to home and business, a new PC application from one of the pioneers of word processing (WordStar's Seymour Rubenstein), the SuperSleuth program, can analyze all the documents on a hard drive and generate a plain English text abstract for each one. For multimedia files, too.

Most recently, I find myself having banished from my mail (and the recycling bin) all technology trade publications on paper. I prefer instead to link to the latest headlines online within minutes of their posting on dozens of technology news sites from headline-agglomeration Web sites: the human-edited, bot-generated Newslinx and 100%-bot NewsHub. I'm certain Technologywriter is just around the corner and it worries me enough to keep me up at night.

Is my dread irrational, as insists my wife (a lifestyles journalist, a specialty not likely to be mastered by machines)? Admittedly, no one has been able to synthesize a readable high-tech press release, let alone a clear expository article explaining some new technology to a nonexpert in the field. To interpret the latest developments properly, a tech journalist must know not only about prior art, current affairs and future trends, but also how much or how little a publication's readers know-tough tasks to program. So there's really no software close to making me obsolete, yet. That doesn't mean it couldn't happen in the blink of an eye.

So I had to find out what Roger Helms, Sportswriter's sire, is doing. After nearly five years without a mention of him in the press, he must be closer than anyone else to unleashing an automated journalist. With a trembling hand I pushed the digits on the telephone to call him at his residence in Minnesota.

I'm surprised and relieved when Helms tells me that he's no longer in the computer-generated journalism business. Further, he assures me: "I do not expect to hear of anything to replace journalists in my lifetime." (Helms is 47. I'm a few years older, so feeling even less threatened.) The problems are just too daunting. The Sportswriter program, written as a simple script in Apple's Hypertalk hypertext software, actually sold to 150 small-town newspapers, but its limitations quickly showed. It was a clever programming feat based on a rarefied journalistic domain: "In sports, the language is intimately tied to numbers," he explains. "The numbers prompt all your thinking. This kind of software doesn't work for anything that isn't quantifiable." So even if automation comes, financial and business reporting are far more likely to succumb than technology journalism.

But wait a minute. If Helms doesn't expect anything replacing journalists in his lifetime, what about the sports reporter in the Wall Street Journal article? According to Helms, the paper didn't get it right. "It bore no relation to reality." Anyone automated out in the wake of Sportswriter was marginal to the news-gathering process. "A lot of these newspapers have staffs of two and-a-half writers-two full-time and one part-time-who can't go out to see every high school game. They all depend on forms sent in by the coaches." Nor was the program a great time-saver. "That was a big misconception," he admits. "Sportswriter required the time it took to input all the game information, followed by someone to spruce up the story."

Still, Helms sees computer-generated journalism meeting a need at the small-staff, low-budget end of news publishing. Especially when "expectations seem to be coming down, while the amount of information people want is growing. Getting it in unfiltered units is important to people." With the elimination of news-gathering middlemen on the Net, bringing direct access to information by readers no longer in need of professionals to interpret for them, the threshold for automated journalism could fall to well within current PC capabilities.

I'm torn by this outcome. On the one hand, journalists' abilities (including mine) are being augmented by computer-mediated news (no more papers or tech books for me). But isn't there a risk in the loss of human insight? We all could use a journalistic Alfred to keep watch on things where automated systems can't. Still, I must confess, I wouldn't mind having software write this essay-while I go off and enjoy an unseasonably warm day today. Who knows? I could run into Alfred at the race track.