

Machine Translation at the Crossroads

OPINION BY
JOHN FREIVALDS

Mark Twain, on seeing his own obituary in print, is said to have remarked, "Reports of my death have been greatly exaggerated." Vendors of machine translation or MT (the process of using the computer to produce translation), having read enough of their own obituaries in the trade press, are in similar denial. In this article, industry consultant John Freivalds argues that as a result of grandiose MT claims, we have thrown the baby out with the bathwater. The dawning of a new era for machine translation? Read on.

The year was 1990. UPS, a leading parcel-delivery service in the United States, launched its international air-express service to compete with FEDEX for this lucrative business. As part of this launch, UPS wanted translations in 16 languages for a number of items: instructions, rate cards, operating manuals, marketing and training manuals, and advertisements. It asked a number of translation bureaus for proposals to manage this task. Technical expertise in large-scale language-management projects was clearly important, but one requirement perplexed me.

UPS, then headquartered in Greenwich, Connecticut, stipulated that total turnaround time for translation between the translation bureau and UPS could not exceed four hours! The thinking, perhaps, was that a machine could simply process the text, bypassing the need for human translators.

The World According to Microsoft

Today, large corporate purchasers are far less naive about the powers of automated translation. At the same time, most of them require serious vendors have some familiarity with automated-translation software.

And no wonder—if one believes industry analysts, the supply of human translators cannot remotely keep up with the burgeoning demand for foreign-language versions. At the recent meeting of LISA (The Localization Industry Standards Association) in June, Franz Rau of Microsoft pointed out why automated-translation capabilities are essential. He stated that only 20 percent of what can be translated now is being translated into 30 languages, but by the year 2005, 60 percent will be translated into 80 languages. He contends that the number

An industry consultant argues that reports of MT's death have been greatly exaggerated.

of translators worldwide will grow only slightly.

This market growth will come from the pressures of companies to capture market share by using languages other than English to sell, and new legislation to require documentation in languages other than English. The EC, for example, will require all documentation to be in an EC language by June of 1998.

And it has not just been the EC that demands translations. In 1994 Wal-Mart expanded into Mexico and ran afoul of language requirements. The company violated newly imposed Mexican import regulations which require all imported manufactured goods to have Spanish-language labeling. Trade officials shut down the Mexico City Wal-Mart for a day and made it provide Spanish language labels for 13,000 products.

Thus Rau contends that there is no way human translators struggling to translate 250 words an hour can keep pace with this need for more translation.

Rau maintains that the solution will come in the use of more translation memory and automated-translation software. Microsoft was one of the first major software publishers that required its vendors to have such capabilities.

State of the Industry

Automated-translation software has undergone a major change in positioning in recent years. Touting MT as a panacea in the beyday of AI (artificial intelligence), many publishers of automated translation software didn't work hard enough to tell people under what conditions the software would work best. In that sense, it was oversold by some companies giving the industry as a whole a black eye. "Language-management solutions simply don't come in shrink-wrapped boxes," noted the translation manager of a major medical-device company based in Minnesota.

When Caterpillar began its Controlled English program in 1970, the potential for automated-translation software became more readily apparent. Caterpillar was one of the first major corporations to commit itself to solving its mounting translation needs, but it chose to do so by funding its own research-and-development effort. Since then most multinationals have

relied on the efforts of automated-translation software companies. Alpnat was perhaps the first translation vendor to proclaim that it was using automated-translation software to do client work, and it was followed by a number of other firms. Today, Lexitech in Canada is probably the leading translation bureau that in seeking clients advertises its capabilities in automated-translation software.

Lernout & Hauspie, in its effort to build a world linguistics giant, has added automated-translation capabilities, and in a fairly recent move, Berlitz has created a new high-level technology position. The person filling this position is tasked with evaluating state-of-the-art translation technology, including automated-translation software, for all Berlitz production facilities.

Their efforts, and those of automated-translation software firms have slowly begun to change perceptions. Meanwhile, MT vendors have adopted a decidedly more realistic tone in their claims.

In fact, companies like MT pioneer Logos have gone out of their way to point out that automated-translation software does not offer the greatest gains in productivity, and that greater gains come from process design, computer-aided management, interface design, software tools, terminology updates, and translation memory. "Automated-translation software is the last step in rationalizing the translation process," says Logos Sales/Marketing Director Michael Marubio.

"Prior to this year we were selling companies a 'Ferrari' in the hopes that they could drive it without being trained," said Marubio. "Our new strategy is to provide companies the understanding of how to maximize the benefits of our high-speed tools." Logos, which has invested \$60 million and 1,500 person-years in research, claims it can reduce translation cost and time-to-market by 50 percent. And like other high-end MT vendors, Logos has abandoned its strategy of selling expensive servers, in favor of a lower-priced Internet translation approach. "We will still sell you a server if you want one," notes Marubio, "but even if you buy a server, remember it is a tool, not a solution."

In an effort to gauge what the marketplace knows about automated translation software, we conducted a mini-survey of 25 top companies known to be among the leaders in translation volume. Here are some of the responses. Carolyn Blauw of Motorola uses automated translation software now and plans to continue with it in the future. She states a vendor's ability to use automated translation software improves their rating of a vendor. Robert Von Falkenberg, who oversees the major language effort at McDonald's, does not currently use automated-translation software, but would be more favorably impressed by a vendor that did have this ability. Von Falkenberg adds that he foresees using automated-translation software in

Solace for MT Skeptics

Those who doubt machine translation will find a major role in the professional-language scene will find ample ammunition in the latest book by computer scientist Douglas R. Hofstadter, Pulitzer-prize-winning author of *Gödel, Escher, Bach*.

Le Ton beau de Marot: In Praise of the Music of Language (BasicBooks, 1997) includes a wide range of English versions of an old French poem to illustrate the complexities of language and translation, and takes a hard look at the theory and practice of machine translation. Here are a few words of comfort to those who think the machine cannot begin to supplant a human agent:

"With a few exceptions, such as Xerox's eloquent Martin Kay (who grew up in a family of translators), the field of machine translation seems nearly bereft of an attitude of deep humility and respect for the subtlety and beauty of human language. Over and over again, one encounters articles and publicity claiming degrees of success that, if true, could only mean that all the mysteries of human language (and a fortiori all the mysteries of the human mind) had been fully cleared up."

Language International welcomes lively debate on the subject of machine translation. Please contact the editors regarding potential submissions.

the future. Apple is currently reevaluating how it will handle translation, and has a mandate to include automated-translation software. Telecommunications firms like Nortel and Erickson have already committed themselves and their vendors to automated-translation software.

Other companies are waiting in the wings. Al Miller of Deere and Company states, "I see it as a tool and I'm interested in it but you still have to convince me." But we do know that one of Deere's vendors worked hard to get Deere's business by demonstrating the value of automated-translation software, causing one of Deere's existing vendors to buy a license to stay competitive.

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*John Freivalds is
managing director of
JFA, a marketing
communications
company specializing
in language technology.*

