Translating in America
MT evaluation and new frontiers

Report by
Bob Clark

Last November the American Translators Association (ATA) held its 33rd Annual Conference in San Diego back-to-back with the first MT Evaluation Workshop organised by the International Association for Machine Translation (IAMT). Could it be that human translators are finally prepared to accept Machine Translation into their club? Bob Clark went along to find out.

The further south AMTRAK's San Diegan carried me away from the weirdness and violence of Los Angeles (I'm allowed to be critical, by the way, LA is my home town) the more attractive the scenery became. The train followed the coastline and Southern Californians were out there being laid-back, barbecuing on the beach. Surfers could be seen jockeying the breakers. Just outside of San diego I saw the sun sink into the Pacific and I thought to myself, "this could be a good one!" The feeling was confirmed when I reached the San Diego Princess Resort, the conference venue, which I expected to be the usual large-scale, faceless Holiday Inn/Hilton complex, but turned out to be a lavish, sprawling paradise that seemed to be about the size of Wales, dotted with palm trees, swimming pools, putting greens and its own beach, a lovely and incredibly distracting setting.

On Monday morning, *Muriel Vasconcelles* officially opened the first ever Machine Translation Evaluation (MTE) Workshop to be held by the IAMT and thanked the National Science Foundation for sponsoring it. She also thanked *Denis Gachot* for formulating the warmup exercises that were given to all participants prior to the workshop. The plan was for everyone to complete the exercises based on DARPA's MTE methodology, the results of which would be tabulated and presented on Tuesday. The list of participants exceeded a hundred and included MT-watchers, MT-users and MT-researchers. The list of researchers read like an MT Hall of Fame. *Professor Makoto Nagao*, President of the IAMT gave us the background of the Association. *Yorick Wilks* spoke of the traditions in MTE and where it is headed. *Margaret King* reported on work being done by the International Working Group on MTE and *Lol Rolling* gave us an overview of MT and MTE activities in the European Community. Several MTE meth-

San Diego Princess Resort

odologies were presented in detail over the course of two days and I have to agree with my colleague Colin Brace, who commented in his report of the conference in *Language Industry Monitor*, "you might have been forgiven for thinking that evaluating an MT system is almost as complex a matter as developing one". I was very relieved to hear *Ed Hovey* echo vendormy feelings when he remarked on Tuesday morning, "Yesterday's discussion was not very informative. A lot was covered but we didn't get much out of it". At one point *Henry Thompson* declared that he had reservations about certain methodologies, such as Grammatical Test Suites and Radar Charts. They might be useful to developers but they could be downright misleading for MT buyers. How could a buyer decide which system to purchase based on the information available? Professor Nagao smiled and replied, "if the buyer is undecided, he will not buy a system". Although there seemed to be little agreement on which evaluation technique was the best or even which evaluation criteria were acceptable, everyone agreed that evaluation from the developer's perspective (the "glass box" approach) should remain separate from evaluation from the user's perspective (the "black box" approach). It was clear that many more workshops would have to be held before a universally acceptable MTE benchmark would emerge.

A number of MT vendors were demonstrating their wares at the MT Showcase, which was held next door to the Workshop. Companies included LOGOS Corporation, Intergraph Corporation, Seagull Software, Sharp Corporation, EJ Bilingual Inc and Systran

Translation Systems Inc. During his presentation of Systran, *Alan Portela* discussed the new direction his company was taking by offering translation services directly to customers. The good news for translators was that post-editing work is being subcontracted to translation companies. Most of the exhibitors remained for the ATA Conference and were joined by the usual selection of booksellers and multilingual software vendors, such as IBM, with their Translation Manager 2, and MCB Systems, demonstrating MultiTerm for Windows and Translator's Workbench II, developed by the Stuttgart-based company Trados.

Three pre-conference seminars were held on Wednesday: *Revising Technical Prose, Translation for the Spanish-speaking - Part 2* and, maintaining the MT thread, *Machine Translation for Translators*, which I chose to attend. *Veronica Lawson* took the first session and delivered her *Child's Guide to Machine Translation*, providing us with an excellent introduction to MT including definition, typology, evaluation and, most importantly, which texts lend themselves to automatic translation and which do not. *Joann Ryan*, of Systran, then presented a detailed chronological survey of companies and institutions actively using MT, listing the systems used, languages, platform, purpose, document type, annual output, dictionary size, staff, input methods, pre and post-editing statistics and feedback. Organisations included the U.S. Air Force, XEROX Corporation, Pan American Health Organization, Siemens Stromberg-Carlson, Lexi-Tech, Hartmann International and the National Criminal Justice Reference Service. *Margarita Baena*, of CIAT, Cali, Columbia, shared her experiences as a user of ENGSPAN, a "try anything" system developed by the Pan American Health Organization. She said that the collaboration of Human and Machine translation was like a marriage and that if translators could not free themselves of their natural suspicion of post-editing they could eventually find themselves out of a job. "In order to become successful post-editors", she said, "translators must develop a positive attitude. If you don't like machines, don't bother. If you aren't flexible, don't bother. Get to know and accept the program, understand you new function, become familiar with available tools, develop new habits, adapt". Very useful and valid advice. A panel of users then briefly discussed the systems their companies are currently employing. Those taking part were *Margarita Baena*, *Bob Hensley*, Language Translations Manager for AT&T, *Doris Albisser*, Head of the Computer-integrated Translation and Terminology Department at the Union Bank of Switzerland, *Ghassan haddad*, Senior Manager of Product Translation at Intergraph Corporation, and *Daphne Walmer*, User Documentation Manager at Rosemount Inc. A lively discussion period then followed which reflected the traditional fear and suspicion of translators: "Have you experienced much resistance from your translators to using MT?" Ghassan Haddad: "We've not experienced any resistance. We have never said that anyone *had* to use it, but no-one refused". Veronica Lawson then quipped, "Perhaps it would have been better if you had said, 'No, you *can't* use it!'". Doris Albisser said that MT must be introduced gradually and that maximum efficiency would probably not be achieved in less than a year, given the required training of translators in post-editing, the building of dictionaries and fine-tuning of the system. In response to the remark, "There's obviously no role for the freelance translator in all this", both Hensley and Haddad replied that freelance translators were frequently used. They are trained on-site and then send and receive work via modem. Someone asked whether there were any university courses in post-editing available to translation students. Muriel Vasconcellos said that there was a big gap between the training currently provided and what the market demands. She also said that post-editing is a very specialised process and that some translators never get the knack of it.

On Thursday morning the ATA continued its long-standing tradition of maintaining a locally inspired theme and the 33rd Annual Conference of the American Translators Association was played in by a full blown mariachi band (one wonders, if the conference is ever held in Fairbanks, Alaska, whether there will be a dog-sled race down the middle of the room!). In his welcoming speech *A. Leslie Willson*, ATA President, remarked that there were just short of a thousand people attending this year's conference, making it the largest ever, and that there were sixteen nations represented. *Eyvor Fogarty* and *Mary Cotton* brought greeting from the International Federation of Translators and hoped that they would see everyone in Brighton next August for the 13th FIT Congress. Over the next three days no less than a hundred sessions were held in ten different meeting rooms. As usual, the sessions were grouped into categories such as Translator Training, Translation Studies, Terminology, Literary Translation, Scientific and Technical, Translation and Computers and Translator Workstations.

Again, I followed the MT trail and sat in on *L. Chris Miller's*

L. Chris Miller

Study of Machine Translation on PCs. Of the 165 PC-based Machine Translation packages Ms Miller tracked down only nineteen were available on the market. Six of those were not actually able to run on PCs and required at least a workstation platform. Systran was included because it will soon be able to run on an IBM PS2 using a PC370 card. She made it quite clear that the report was purely for information purposes and no attempt had been made to evaluate or compare the products, which was a bit of a disappointment for many attending as that was precisely the reason they had come in the first place. However, it was useful to find out what they were, which language pairs they handled, required platforms and how much they cost. Prices ranged from $99.95 for Micro Tac's Language Assistant to $28,000 for the Siemens Nixdorf METAL system. Ms Miller had worked with Globalink's GTS system at the World Bank and said that any system takes at least two to four weeks of customisation before it is truly effective. Muriel Vasconcellos commented that MT systems were like house pets. They needed care and feeding. She then asked how people thought that the ATA might be able to help in providing information on MT. Suggestions included information on how translators could prepare themselves for working with MT such as post-editing techniques. Some felt that workshops should be provided to give translators hands-on experience. Another suggested a post-editing workshop. A Users Forum in the ATA Chronicle was mentioned along with a time-and-motion study on different systems. *Tony Roder* remarked that translators today are like craftsmen at the time of the industrial revolution. When lathes appeared, those that chose to use them survived, those that didn't disappeared.

Gerhard Obenhaus gave an excellent paper on *The use of Online Networks & CD-ROMs for Translators*, an in-depth overview of remote databases and CD-ROM technology (pp. 6-10 in this issue). At the session entitled *MT in Practical Applications* chaired by *Peter Wheeler*, Bob Hensley discussed his experience at AT&T using the LOGOS, Intergraph, Sharp and Tovna systems. He said that translation is very much part of AT&T's total documentation process. In 1988 they processed fifty thousand pages using MT. By the end of 1992 they expected to produce 350 thousand pages. They find that Machine Translation is slower than Human Translation in the initial stages of a project but the speed of MT increases for approximately nine months and then levels off to about twice the speed of a human translator. Translation cost is half as much as Human Translation. When asked why they used so many different systems, he explained that TOVNA was the only Russian system available, Sharp had the only Japanese system on the US market, LOGOS offered a good English-Spanish

system and Intergraph supplied language pairs that were not available with the other systems. Doris Albisser, discussing METAL, and Margarita Baena, ENGSPAN, both emphasised the impact of introducing MT into a company. Ghassan Haddad said that Intergraph used DP/Translator to automatically translate all their product documentation but not the user interface, which is handled by custom tools they have developed to automate the process.

As if replying to the comment made by Muriel Vasconcelles during the MT for Translators Seminar concerning the gap between the training currently provided and what the market demands, *Dieter Wältermann*, of the Center for Machine Translation and Program in Modern Languages, Carnegie Mellon University, Pittsburgh, delivered a paper entitled *Integrating MT in a Translation Curriculum*. He outlined an experimental course that CMU have introduced on scientific-technical translation using Machine Translation aids from their MT centre. The course will involve a real-life translation task sponsored by two translation agencies, thereby giving the students the rare opportunity of experiencing the sort of traumas that can happen in the real world.

With what is rapidly becoming a favourite double-act at ATA conferences, *Lison and Elliott Macklovitch* brought us news on the updated Canadian Translator's Workstation. The hot item was the new use of corpus-based tools which exploit a bilingual set of source texts and translation with the translation units in each language being aligned.

So what impression did we all leave with at the end of the conference?
a. Judging by the standing-room-only attendance at all the MT-related sessions it was quie clear that most translators are at least curious about Machine Translation. The message was certainly loud and clear: MT is here to stay and translators would be very unwise to pretend that it is otherwise. The fact that MT cannot handle all translation tasks and probably never will is not really important. The unavoidable fact is that there is an enormous amount of automatic translation being carried out every day, generating post-editing work that is processed by guess who? - human translators. The unfortunate thing is that the most vociferous critics of Machine Translation probably didn't even bother to turn up at all. Why do they take it all so personally?
b. The ATA is a successful and growing organisation. The newly elected president, *Edith F. Losa*, sets the target for a million dollar organisation. With its current 4200 members, the ATA is well on the way. The 1993 ATA conference will be held in Philadelphia (see Calendar).

Edith F. Losa