The pragmatic approach gaining ground

Every year Language International tries to identify the long-term implications of the annual Translating and the Computer conference in London, 18 and 19 November. A number of papers at the 1993 conference emphasised the pragmatic or empirical approach, with more reference to real-life situations.

Thus Professor *Yorick Wilks* (University of Sheffield) started the ball rolling by concentrating in his paper, *Developments in machine translation research in the United States,* largely on the statistical approach to translation being used by IBM. *Arthur Lee* (Bull SA, Paris) described the advantages of Controlled English as a communication tool, whether machine translation was used or not. Two lexicographers from the Oxford University Press described how a new English-French dictionary project was based on corpora, i.e. on actual usage, and how this sometimes differed from theoretical concepts of word use as exemplified in other dictionaries. And Professor *Donia Scott* (University of Brighton) brought the techniques of discourse analysis to show that instructions for use differed in structure as well as in wording from one language to another.

These were just four papers from the conference, but they were not the only ones which exemplified what looked like a gentle change of perspective. In the world of technical documentation this movement is called "reader-oriented writing". The world of translation, accustomed to taking the central role and imposing its notion of translation equivalence on the target audience, is now having to take more account of how the target language is actually used.

But perhaps we are being over-subtle. The title of this year's conference was "Machine translation today", but in fact only four of the papers dealt directly with the topic. Yorick Wilks, as already mentioned, used his opening paper mainly to reflect on the successes and promise of the IBM statistical approach to MT. He thought, however, there was a ceiling to the success which purely statistically based systems might have. He foresaw the emergence of hybrid systems, which incorporated both the statistical approach and the linguistic approach on which so many of the machine translation systems developed up to now had been based.

The second paper, by *Seamus Derrington,* of the Nissan European Technology Centre Language Services, was a closely argued critique of MT development. He categorised the field into human-assisted machine translation, machine-assisted human translation, and controlled language operations. He philosophised, with recourse to extended metaphors (in one of them language was seen as a cultural Everest, with translators as sherpas, and machine translation as the oxygen which made *it* possible to attain the summit).

On the second day the important subject of evaluation of MT software and methods was dealt with by one of the leading experts on this aspect, *Margaret King,* of ISSCO Switzerland, president of the International Association for Machine Translation. Despite the difficulties in evaluation, steady-progress is now being made, and the Evaluation and assessment group of the European Communities EAGLES (Expert Advisory Groups on Language Engineering Standards) initiative will be aiming to achieve concrete results within a narrow focus. *Veronica Lawson* presented a paper produced with the collaboration of *Muriel Vasconcellos* analysing responses to a survey of 38 MT users, using 17 different MT systems, a survey conducted earlier this year. Reactions seem generally favourable, but the lower range PC-based systems which have now become a major part of the market are transforming the user profile, with increasing use by persons who are not language professionals. The implications of this are as yet unexplored.

As usual there were a number of papers which were more in the nature of presentations of a particular system, software or service approach. Thus *Patrick de Gale,* of Sage de Gale Information Systems Ltd, (whose 'word engineering' concept was recently featured in *Language International*) explained the importance of planned word flow in a company; *Jörg M. Haake* and *Christine M. Neuwirth,* of the Integrated Publication and Information Systems Institute, Darmstadt, explained how a collective authoring environment called SEPIA could be used for communication support; *Roger Bennett,* of the European Commission terminology unit in Brussels, spoke about terminology handling at the EC; *Gerhard Obenaus,*

University of Iowa, spoke about the Internet electronic mail system; and *Peter Barber*, UK, spoke about how he and computer consultant *Bruce Carroll* came to develop a translation management system (ETM).

Speech processing was represented at this conference by only one paper, by *Norman M. Fraser*, of Vocalis Ltd, describing experiences with the ESPRIT SUNDIAL project. The researchers worked in a number of languages simultaneously. The different language results were expected to be discrete, but by accident the project found it had created the embryo of an interpretive telephony system, in that the structuring of a Dialogue Manager made it possible to input in one language and output in another. This had interesting implications for machine translation, in that automatic language processing could be simplified if there was a structured interface, and by emphasising once again how much easier task-oriented translation was than general purpose translation.

It is always easy to give a paper describing the piece of research or development the speaker has been involved with. But this conference series also needs general survey papers, from speakers who take on the much more difficult task of reviewing the whole fields, and forecasting future trends. *Blaise*

Nkwenti-Azeh, of the UMIST Centre for Computational Linguistics, set out to do this for terminology processing, and *Richard Birch*, of the Rank Xerox Technical Centre, did the same for translation workbenches. Mr Nkwenti-Azeh's survey was workmanlike and thorough, though it did not break any new ground. He called on practising translators to acquire an understanding of the underlying principles and theory of terminology.

Mr Birch's paper seemed a little dated, and he admitted several times that some of the developments he was calling forwere now being implemented, though he was vague about details. It would perhaps have been more useful to analyse the facilities offered by the three commercial translation workbenches now on the market (IBM Translation Manager 2, Trados Translation Workbench, and Star Transit), together with the published results of the ESPRIT Translator's Workbench project (not to be confused with the Trados project), and then look at implications and possible future enhancements.

But the synthesis type of paper is so valuable at this conference that one is always grateful to speakers like Mr Birch who are prepared to survey and speculate.