

## **International Views on MT Panel Discussion**

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### **1 Deanna Hammond's Statement**

#### **MT, the Federal Government, and the Role of Translator Associations**

For much of the federal government, particularly the agencies outside of the defense community, the possibilities of success for MT depend not so much on the quality of the systems available, as on the way in which translating is done. Unless that system is changed, it will be a long time, if ever, before MT finds wide use in the federal government. This paper will discuss the current situation, suggest what might be done and how translators associations can help in the process.

The following are among the factors that make it difficult to market MT systems in the Federal Government; a) Translators are widely dispersed, in small numbers, in many federal agencies, both in Washington and in other cities throughout the country. As a result, there is a certain duplication of effort and very little sharing of resources. b) Subject matter for translations varies widely, based on the interests of the agency in question. Therefore, the types of terminology and areas of specialization related to translations are quite diverse. c) The volume of the translations in a particular foreign language combination in a given agency may not be enough to justify sophisticated MT systems. In fact, the leading languages in demand vary significantly with the agency. d) Workload may vary with the season or world events. As a result, many agencies believe it is more efficient and cost effective to use contract translators, rather than increase the in-house staff, and to invest less in equipment and other resources. e) Unlike the situation in the world organizations, for example, most of the materials to be translated are not generated in-house and they arrive in a form that may be illegible. Between the fax and hand-written documents, some of which are written by persons with little education, translators must even resort to a magnifying glass on occasion.

The implications for MT are obvious: a) Without a

high volume of work in a given language combination and direction, it is difficult to justify MT economically; b) there are no systems currently available for some of the language combinations needed at least in some agencies, and no combination would be useful to all of them; c) it would be difficult to assemble adequate glossaries when the subject matter is so varied; d) use of a scanner would be difficult with a high percentage of the documents to be translated, as they come in on paper and are not generated in-house. Manual input is very time-consuming.

The solution to this dilemma is not an easy one, but at least some of the problems could be overcome. Using the Canadian model, the U.S. Government could merge the bulk of the translating, with some notable exceptions, into one center for translating. This would make the process more cost-effective, reduce duplication of effort, and open the way for MT systems to be used efficiently.

Throughout all of this, the translator associations can play a significant role. They are already increasing public awareness about MT and assuaging the fear of many translators that they will be replaced by a machine. The American Translators Association, for example, through its Translation and Computers Committee, the MT exhibits and demonstrates at annual and local conferences, and regular articles in the ATA Chronicle, is doing a great deal to promote understanding and usage of MT.

### **2 Nicholas Ostler's Statement**

The place of machine translation in the UK, and in Europe as a whole, needs to be seen in the context of some early results of the Bossard/OVUM report to the European Commission on the current status and prospects for the language industries.

In this, translation aids and MT systems were said to account for one third of the current (1990) European Community market for language industries (worth \$2 million p.a.). By 1994 this share is expected to halve, but within an overall market that should have multiplied by

30. Another survey of user-demand showed that multi-lingual tasks, even now, occupy less than 5% of staff's document-processing time.

The picture, then, is of MT as a technology which has loomed unrepresentatively large in the early development of language-processing, but which is likely to shrink to relative terms as other fields of text processing begin to exploit the potential of natural language processing.

The straight forward case for MT, based on multi-lingual need, is likely to disappoint: multi-lingual individuals instead take the strain.

However, the Danzin report detected that the EC's, support of MT in EUROTRA is paying some dividends in unexpected areas. On the one hand, it has created a viable common framework for general-purpose research in natural language processing techniques; and secondly, it has enabled the smaller member states' languages to be provided with basic analysis to support natural language processing.

One can discern a major strength of MT as a framework for wider NLP development: this is the centrality of contrastive analysis of different languages. This is a powerful means of showing up phenomena which are characteristic of grammar (which are in principle different for each language, but for which it should be possible to write a compact set of rules) and those which stem from pragmatic interpretation of the real world (implicitly universal, but intrinsically open-ended).