

The following points were made in the last discussion period in Session 3, after the paper by Bostad on the US Air Force Russian-English Systran.

1. In a discussion of errors, it was pointed out that "do not translate" commands were possible, but rules for inputters on exactly when to use these commands were not a simple matter, and advice would be welcomed. Knowles suggested that the "American Society Bible" error mentioned earlier could have been avoided with a suitable algorithm. Asked if a machine could warn that one is straying into a problem area, Bostad confirmed that not-found words and ambiguities due to part-of-speech homography could be flagged; the USAF Systran concentrated on a small percentage of examples associated with particularly high levels of ambiguity.
2. Van Slype commented on the need to recognise the cost implications of errors of significance; different types of error will involve different costs, principally in terms of human resources. Bostad agreed that not everything should (or could) be solved.
3. The questions of the original motivation for, and the translator's role in, the acquisition of MT were raised. General Motors had been attracted by the financial advantage offered by substantial contracts, while the Francisation of Canada had been another factor. The final decision was taken by their management with Sereda's assistance. At Mitel, similarly, it had been a senior management decision; the company then had no translators to consult, and were moving into foreign-language markets for the first time.
4. On Weidner, a turnkey system, the response time before incorporation of posteditors' feedback was said to vary, up to a maximum of 2 to 3 months.
5. Asked what a new dictionary entry involved for the average Systran user, Sereda answered four dollars!
6. Bostad stated that the types of text best suited to the USAF Russian system were in the hard sciences such as physics, chemistry and electronics (because of extensive dictionaries in those areas); experience with such areas as political science was less satisfactory and also less extensive. Feedback from users was sought, particularly in underdeveloped, highly specialised areas (for example, systems operational analysis). Topical glossaries could then be established (15 so far). Length of text was another factor: all books were machine translated.

In conclusion the Chairman, J Albert Bachrach, summarised the themes which had arisen during the session.

- (1) Distinction between MT use in industrial and governmental settings.
- (2) Differences in eventual use of text; legal implications of some.
- (3) Decisions to acquire MT often taken by those with a faint understanding of subjects in question.
- (4) Difficulties in introducing MT into translation departments without creating upset.
- (5) Changes in attitude to MT necessary on part of posteditors, particularly in anthropomorphization of the machine.
- (6) Potential for application of word-processing systems (to both MT and human translation).

- (7) Need to devise and implement training for posteditors.
- (8) General expansion of translation market.
- (9) Need to identify an optimum level of acceptability for MT.
- (10) Need to structure, update and control dictionaries.
- (11) Need to identify a rule-based "typology" of text which might help to explain why the "hard" sciences, e.g. physics, mathematics, etc., translate better than sociology or economics.
- (12) Need to formulate rules and to update them.
- (13) Need to be vigilant with all aspects of the system to prevent degradation.