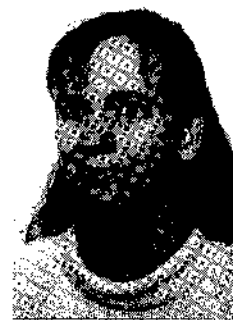


Attitudes towards Machine Translation

What effect do you think Machine Translation (MT) will have on the translation profession? "None at all!" says one. "Translators will have to work even harder: all 'easy' work will be done by computers." says another. "It will eventually revolutionise the business of translation" according to a third. These are a few of the answers that resulted from a recent, small investigation into translators' opinions on MT. Now that MT systems are increasingly used in professional translation, what do translators think about them?



by
Siety Meijer

When my initial research into MT began the future for translators looked rather gloomy. They must have feared for their careers as researchers set out to prove that translation was a task that could easily be taken over by the computer. They must have cheered when the first MT results showed that MT output left a lot to be desired. Especially the damning ALPAC report in 1964, which compared human and machine translation and concluded there was no future for MT, must have caused a wave of relief.

In the years afterwards, however, translators often still lived between hope and fear. Most developers and vendors of new MT systems seem slightly diseased with an inflated idea of the capabilities of their system, promising potential clients a miracle and raising their expectations too high. As a consequence, the product cannot but disappoint the user. And who can blame him? After all, who would accept a restaurant serving him fish and chips when the menu promises smoked salmon and potato gratin. Still, if the unlucky guest had tried to find out a bit more about the restaurant, he would have had a much better idea of what to expect.

For the benefit of both MT system developers and potential users it is necessary that we take a more realistic attitude towards MT products. Vendors should stop overselling their systems, users should become more aware of the strong and weak points of MT. Translators' distrust towards MT is quite often based on a lack of knowledge; the best way to deal with it is to get to know the workings of MT. Moreover, it has long been recognised that current MT systems do not have the capability of putting translators out of a job. The translation demand is ever increasing, and a certain percentage of this demand consists of texts that are beyond current MT capacity.

For the other texts it is true that especially the repetitive, least challenging texts are suitable for MT. And most texts translated by the computer still need to be checked for correctness by a human translator. So it is unlikely that the demand for translators

will decrease. It will, however, change to a certain degree the job profile of translators.

To what extent are people nowadays aware of the capacities of MT? Do translators still see computers as a threat? These were some of the questions that we (some members of the CL/MT group at the University of Essex) asked ourselves when we decided to do something about the limited amount of information on MT available to translators and other people in the language industry by writing an introductory book on MT for this particular audience¹. To find some answers to these questions I prepared a questionnaire and sent it out to a variety of translators, translation schools and businesses involved in MT. The results, as can be seen below, were varied.

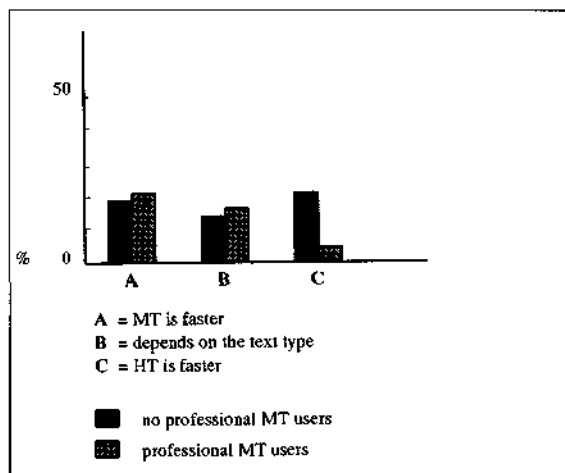
The first question dealt with the alleged strong point of MT: it is supposed to make the overall translation process faster, and thus more cost-effective. Opinions on this topic were divided: 35% thought it was not and 32% said it depended on the text type, which is of course closely related to the quality of translation output. Within the companies which actively use MT in their translation department 50% judged MT faster, whereas 37% said it was slower. This difference seemed to be company dependent, where one company has obviously more positive experiences with MT than the other.

With regard to the quality of translation of current commercial MT systems, 54% of the interviewees simply condemned MT output as bad. Only 13.5% said that the output quality was good, while adding that this depended of course on the system and the text type. Again, a strong division between companies was noted.

The third question concerned the quality of MT output after post-editing. It is sometimes claimed that the post-editor is too much influenced by the draft translation which the system produces, allowing constructions that he would not use himself. Is the quality of a post-edited translation equal to the quality of a human translation (HT)? According to 43% it is, but another 51% claimed that the quality of

post-edited MT is not as good as HT quality. Professional translators/post-editors were equally divided on the issue, with one of them pointing out that although the quality may not seem affected at first glance, there is a tendency to adhere more closely to the source language structure. Several post-editors noted that a lot of time was needed to achieve the same quality.

The fact that the computer can play an important and useful role in the translation process is recognised by everybody. It is firstly important for document processing, formatting and storage (including translation memory which allows translators to refer back to or reuse previously translated text).



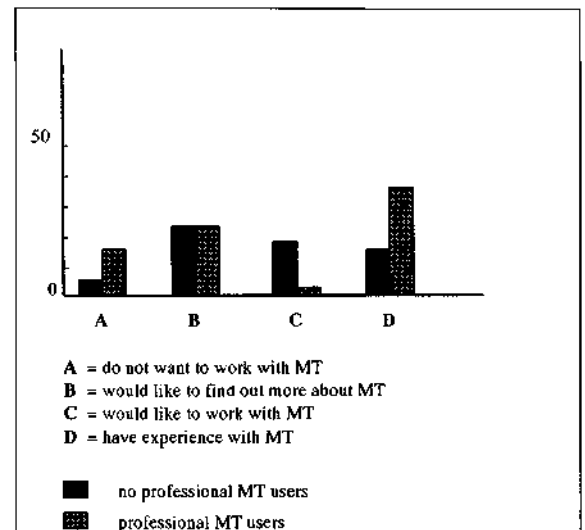
How fast is MT

It offers essential support in the area of on-line dictionaries and terminology banks - the latter guaranteeing consistency throughout texts in term translation. As such, the computer is reducing times needed for dictionary searching and terminology research. Approximately 50% of the interviewees do not want current MT to go beyond these tasks. The other 50% said the task of the computer could be profitably extended by taking over repetitive translations and those texts which are written in simple or restricted language. Post-editing is in such cases of course essential, unless the translation output is only meant to give the user the gist of the text. Thus, while translators can see different levels of usefulness for the computer, they generally regard it capable of taking over some of the repetitive translation tasks, thereby leaving the translator more time for more interesting and creative work. Some of the replies to the earlier questions do indicate however that the optimal usage of an MT system depends on the system, user environment, text type, etc.

The overall effect of computers on the translation profession is on the whole seen by most interviewees as a positive one. But in order to achieve this positive effect translators should be well aware of the

available facilities and how to optimally combine them with the different text types that can exist within a company. This means that for some texts full HT is required, some may be done by full MT, or MT plus post-editing, whereas for others it would be desirable to have the terminology of the text translated by the machine, with the translator handling the rest of the text. The quality of current MT is insufficient to pose a threat to the job market.

Of all the people who filled in our questionnaire 50% had experience with MT, some of them only in an experimental way, but 35% had working experience within their company. Also, 50% expressed the wish to find out more about MT. This percentage was evenly spread over people with and without MT experience. Some 20% of the interviewees expressed a desire to work with MT. Exactly the same percentage vowed that they did not want to work with MT, 12.5% of whom are currently working with MT (which is almost one third of the interviewees involved in MT).



Working with MT

Noting a big difference in reactions between the main two companies that sent in their answers it would be enlightening to add a few more details and to try and find an explanation for this difference. Half the translators/post-editors in what I shall call company A do not think that the overall translation process is faster when using MT, all of them say MT output is of poor quality and about 60% think that the quality of post-edited MT is not as good as the quality of HT. When asked about the role of computers only about 40% mention the possibility of using them for translation (in which case they refer only to the translation of repetitive texts). Apart from that, 50% of them said specifically that they did not want to work with MT (it may be interesting to mention that the system which they are using is Systran).

The results of company B are much more positive: they think MT is faster, has a reasonable quality and that the quality of post-edited MT is as good as that of HT. They use it for the translation of concrete, simple language and repetitive texts and as such it is a good tedium reliever. They point out that their MT system (Weidner's MicroCAT) will not be able to deal with more difficult texts, and that the role of the revisor is essential.

I do not want to draw too many conclusions from this because there are so many aspects that can affect MT performance within a company, but the difference in MT systems between the two companies seems an obvious explanation. Another good reason could be the text types that the different companies submit for MT, with some being more suitable than others. This does stress once more the importance of assessing what is the best combination of MT and HT within a company. After all, the answers of the translators in company A indicate that

their current MT setup does not yield the advantages it is supposed to yield. Reassessment of the MT setup in this case seems urgently needed.

As for non-MT users, it is interesting to see that a large number of them express the desire to find out more about MT, or to work with MT. It indicates translators are appreciating the possibilities that automation can offer them. They also demonstrated in their answers an awareness of the different factors that influence the effectiveness of MT. Every translation setup will be different with regard to the amount of texts to be translated, the number of different text types, sublanguages, the translation purpose, controlled input text, etc. In order to exploit the possibilities that MT can offer (which will be different for each MT system), it is important to find out the best usage of computers in a particular environment. In that way it can be true that by getting to know what once was considered the enemy, one may find a friend for life.