A New Dawn For MT?

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magine you have worked for decades on a project that promised to deliver nothing less than one of humanity's dreams. Suddenly you begin to realise that, despite all of your efforts, you will not be able to deliver. Imagine – and this would surely be an even more difficult situation – you have already announced that your efforts to realise this dream have been successful when, in reality, you know that you are going to fail miserably. What are your options?

According to a paper recently published in the proceedings of ASLIB, Translating and the Computer 25, by one of the most respected and eminent industry figures, Jaap van der Meer, "Machine Translation (MT) has long been a controversial topic, the source of illusions, jokes and even serious disputes. Research and development in fully automatic translation has been carried out for fifty years. At regular intervals, researchers (...) have heralded the big breakthrough".

Jaap van der Meer is right. MT developers announced again and again that they had finally proven their fully automated high quality machine translation systems could make humanity's dream a reality. They claimed to have solved the dilemma, created by the tower of Babel, with the help of a clever computer programme.

Because executives with purchasing power (and little understanding of the issues involved) were easily impressed by 'hard figures', it became fashionable to randomly quote percentage values as a measure of success in MT. 95% accuracy, a minimum of 40% savings, 100% consistent use of terminology and so forth.

Blinded by the enormous potential savings, these executives bought high-powered MT systems and employed linguists to finetune and programme them. This managed to create short-lived, cyclical surges of interest (and investment) in MT. However, they were always soon followed by a depression (and redundancies) because customers quickly realised that, once again, over-enthusiastic sales executives had taken them for a ride.

At ASLIB, Jaap van der Meer announced that this time "the breakthrough is true" and that it is "market-driven rather than technical". He conceded that "MT is not perfect" but that "it has become an economic necessity". He presented figures to prove that, finally, MT can be employed in such a way that it makes economic sense.

Another respected professional, Ross Smith, from PricewaterhouseCoopers, provided "An Overview of PwC/Systranet on-line MT Facility" at the same conference, offering use statistics and feedback, in addition to some practical examples around areas such as gisting.

The user feedback reported by Ross Smith is positive overall. (Frankly, looking at the ever so slightly skewed questionnaire, one cannot entirely discard the suspicion that the positive user response was at least partially pre-programmed.) The only negative example reported came – to the amusement of the presenter and his audience – from a user who had attempted to translate a document written in Dutch into English, using a German-English MT engine. No wonder he was not happy with the translation!

So, it seems that there is not just one, but many reasons to push the boat out and organise celebrations for the new dawn of MT, the final breakthrough.

Or are there?

It took smart MT developers years to comprehend that, even in a sales situation, the correct answer to the question "Will MT help us to save money on translation?" is "It depends". They realised that although this is probably the most difficult answer of all, the alternative, i.e. quoting misleading and simplified percentage figures, was not appropriate and had caused, on previous occasions, much damage to the MT community, undermining its reputation and credibility.

Not only are we now presented with yet another set of figures intended to prove the success of MT, but also with this new vision that it is ok if MT produces bad translations. Apparently, the correct use of language does not matter as long as it makes good business sense: MT is really our only hope to deal with the enormous volume of material that needs to be translated in our globalised economy.

Most US programmers understood, even in the early days, that people speak different languages and that there was a need for what became known as localisation. It just took linguists some time to explain to them that even little marks on individual letters (accents and the like) can make a significant difference in the meaning of otherwise identical words. Finally, programmers agreed that 7-Bit ASCII was not sufficient to represent meaning in languages other than English – the day they did was truly a day for celebration.

Are we now being told that language rules, syntax, grammar and terminology (never mind little marks on top of letters) do not really matter anymore because there is a business imperative to use MT? We are told that MT is most successfully being used, not by language professionals, but by uninitiated office workers who just want to get the gist of a document, sent to them in a language they do not understand. When it transpires that they are not even able to determine the language that the original document was written in and therefore pick the wrong MT engine, it does not raise a red flag in our mind but, rather surprisingly, just causes the expert and his audience to pity the poor simple-minded user.

Listening to the experts, as a user and researcher, one cannot but sense that this final "breakthrough" has just pushed the bottom out of the barrel. It appears that the red light we see on the horizon is the sun finally setting on MT, rather than the announcement of a new dawn for the realisation of one of humanity's long cherished dreams.

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