New trends in translation practice: some notes

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1. Introductory remarks

1.1. The advent of neural machine translation and generative AI has led to inspiration as well as to despair among translators. Can they afford to ignore recent developments? Will these developments threaten their profession or facilitate it? I will try to assess this briefly below in what I call a "memo": a quick survey of my thoughts on the subject at the moment.

1.2. A disclaimer: anything we say about AI today, may be outdated by tomorrow. This also holds true about the notes in this memo.

2. What are the new trends that matter?

2.1. <u>NMT</u>. The success of neural machine translation (NMT) cannot be ignored. Much depends on the language combinations and on topics but in many cases NMT offers translations that, with suitable post-editing, are helpful for the translator.

2.2. <u>AI</u>. Translation via AI chatbots (i.e. generative AI based on LLMs: Large Language Models) is hyped as new but is not entirely different from NMT. Chatbots also rely on large language models, deep learning and neural networks. The difference is that NMT is trained on parallel texts, whereas the chatbots are trained on any type of text and are "text generators". A potential advantage of the chatbots is that they may consider context, whereas NMT translations remain very much segment-based.

2.3. <u>Updated CAT programs</u>. AI integration into CAT programs is evolving. Early "AI enhancements" have included chat-based alternatives to help files. The plug-in *AI Professional*, as available in int.al. Trados Studio 2022 and memoQ, automates batch tasks like analysis and pre-translation.

More interestingly, *AI Professional* makes it possible to add AI prompts that help customize the output. The plug-in has recently been replaced by *AI Assistant*, a component of *Trados Copilot* in the 2024 release of Studio (launched in the week that this memo was finalized).

The most significant innovation is that *AI Assistant* allows the translator to choose a cahtbot as a translation engine (instead of a "traditional" NMT engine). A paid subscription to an LLM, for example Open AI's Chat GPT 4.o, is needed for this. Prompts can be added to make sure that the right kind of style is achieved. Similarly, Custom.mt

allows the choice of an LLM as a translation provider and also offers the option of adding prompts that may help set the right tone (and "temperature") in the target text.

Furthermore, AI can perform a QA check on the machine translation output and it can provide suggested reformulations of a target segment. The latter features can be regarded as contributing to automated post-editing.

AI can help in translation project management as well but this aspect will not be dealt with in this memo.

2.4. Term extraction. The chatbots do a fairly good job of extracting candidate terms from a source text, obviating the need for additional extraction software.

3. What choices should translators make?

Faced with the new opportunities, translators should follow their individual preferences when embracing the new developments.

3.1. Term extraction. Translators who formerly avoided the use of term extractors (maybe because they required payment, or were difficult to use, or generated too many unwanted suggestions) can profitably use even the free versions of ChatGPT or Google Gemini. It is not too difficult to formulate a suitable prompt and to paste in the text that needs analysing. However, it is uncertain whether texts provided to the chatbots will or will not be used in one or other way by the developers. Texts that had better not be shared online therefore do not qualify.

At the moment of writing, ChatGPT 3.5 may offer more candidate terms than Gemini but it may also come up with (sometimes lengthy) word combinations that are not terms. Gemini is better at avoiding this kind of "noise".

Knowing beforehand which terms are likely to cause translation problems, is an asset. The translator can research them and enter them into the term base before s/he starts translating.

3.2. Old school translation. Some translators still avoid using NMT at all cost and if that is their choice, one must consider accepting this. The typical translator who takes this view, is someone who has translated for many years, working on the same text types, possibly also for only a few long-standing clients. It is natural for this translator to rely on his/her translation memory and term base, both of which will supply the wording and the terminology that suit the faithful client best.

3.3. Occasional support only. Many translators want to remain "in command" when translating. They do not populate the target segments with machine-generated

translations from the start and only consult the machine translation when they get stuck. This was a practice that I recommended when machine translation was at the stage of SMT (Statistical Machine Translation), because its results were somewhat uneven. But it is a choice that can still be made in the case of NMT, especially when the NMT quality is seen to be below par in a particular project.

It is also a choice that can be made for economy reasons when a chatbot is used as a translation engine: during a webinar on Trados 2024, it was admitted that batch tasks like "pre-translate" are more of a burden on the purse than LLM translations of single segments. Batch tasks also take much longer when using LLMs.

3.4. Full MTPE. Translators who are relatively new to the profession will more readily ask their CAT program to pre-translate the whole text and populate the target segments with the NMT results. The next step is then to post-edit the translation, a step that requires new skills and a sharp eye for remaining errors. This method is now known as MTPE: machine translation followed by post-editing. The temptation to use MTPE is greater when NMT appears to yield very good results, which, as was said earlier, may depend on text type and language pairs.

3.5. Switch to LLMs? It is too early to say whether the AI supplements now promised in newer versions of CAT products will be useful. The opportunity to include a prompt explaining what the style of the target should be like may hopefully improve the output and make the translation better suited to the context. Whether the translation output of an LLM engine will always be equally good as that of NMT, remains unclear: opinions differ. On one of their websites, Trados warns that the quality may be lower than with NMT.

The option to have the target segment reformulated by AI or to have mistakes and omissions spotted by extra modules (like *Smart Review* in Trados 2024) may also prove helpful and could contribute to automated post-editing. Experience will tell whether these features offer real advantages.

3.6. Data security. As in the case of term extraction, one has to keep in mind that machine translator providers as well as AI providers may make use of the texts that the translator processes. Some systems (like DeepL Pro) promise not to do so. An Azure version of Open AI offers the guarantee of a secure environment but comes at a price.

4. Old and new skills required

4.1. Old skills.
Translator training will henceforth require the familiar old skills as well as new skills.

Among the old skills, we may mention: understanding source texts, an excellent command of the target language(s) and specific translation skills.

4.1.1. Before trainee translators embark on the use of CAT programs and MTPE, it remains important for them to get trained in properly understanding source texts. An excellent grasp of the grammar and vocabulary (including idioms) of the source language is obviously part of this but so is, among other things, a knowledge of institutions and conventions of the source culture.

Moreover, aspiring translators should especially be good at uncovering the gist of a text and its pragmatic function (its skopos). Good exercises include paraphrasing sentences of the original text and summarizing the whole text. Promoting the habit of grasping the overall message of a text, should guarantee that translators will go beyond the single segment once they use a CAT program.

4.1.2. Honing skills in the target language is a second traditional recipe and it remains valid under the new working conditions. It will help the post-editor assess the appropriateness and fluency of the MT translations as well as the felicity of stylistic reformulations offered by the AI enhancements.

4.1.3. Several other skills are needed for a successful transition from source to target text. They include such things as dealing with named entities, conversion of measurements, awareness of idioms and false friends etc. NMT and LLMs have made giant steps in automatically solving some of these issues but the post-editor must be able to spot and correct those instances where MT still makes mistakes.

Identifying terms and their equivalents is another important skill. Translators should be trained in retrieving and assessing sources for terminology and in populating term bases.

4.2. New skills.
New skills will have to be trained as well, especially for those who wish to embark on MTPE.

4.2.1. The occasional "hallucinations" thrown up by neural MT are easily spotted. It is more difficult to discover the subtler errors in the beguilingly fluent translations offered by the system. NMT may, for instance, fail to translate a fragment of the original segment and yet deliver a nice sentence. It needs constant and careful comparison of source and target to notice this during post-editing. As CAT programs evolve, some of these errors may be spotted automatically by AI enhancements.

4.2.2. For technical or specialist texts (the staple for a translator who wants to earn her/his living), terminology is very important and constant monitoring via an attached termbase in the CAT environment is an indispensable asset during post-editing. A QA check for terminology is an additional option.

Terminological errors that the post-editor should be aware of include word for word translations of a compound term, where a more valid term exists in the target language. Other easily overlooked terminological problems include the use of different synonymous terms in the same text or the mention of an unexplained abbreviation early on in the text, with the full term only mentioned further down, when it is not clear that they refer to the same entity. Furthermore, NMT has been seen to supply a broader term for a concept than the more specific term needed to render the meaning of the source term.

4.2.3. It may be argued that some MT providers like DeepL now offer an opportunity to feed a termbase to the system, so that monitoring of terminology during the post-editing phase may become superfluous. There is hardly any literature at the moment that assesses the success of this method and as NMT is notorious for making its own decisions, it remains to be seen whether it may not ignore the terminology input from time to time.

The same holds true for the argument that adaptive NMT systems can be trained on a user's termbases. It remains advisable to check during post-editing whether the system has always picked up the suggestions correctly.

NMT systems or chatbots trained on domain-specific texts are likely to become better at selecting appropriate terminology. This, however, requires sufficient amounts of training data for both languages.

A very promising new feature offered by the *AI Assistant* in Trados 2024, is that the chatbot translation will automatically pick up the terms suggested by an attached termbase. An existing Multiterm termbase can be used for this; there is no need to convert it to a proprietary format.

Another bonus expected from translations provided by chatbots is that they may be more consistent in their choice of terms within one text, because they are more aware of the context than NMT systems. At the moment, there is conflicting evidence on this issue in online discussions. The supposed consistency can anyway only be expected when the text is offered to the chatbot in one go. As explained in 3.3, batch translation of a complete text tends to slow down the system and to cost more. Awareness of the broader context can hardly be expected when the chatbot translation remains segment-based.

4.2.4. A further skill that will be needed by the translators is that of "priming" the tools so that their translation output becomes better from the start. At the moment, this depends on such things like appropriate prompt writing or handling adaptive systems.

5. Conclusion

NMT and other AI instruments already offer important support for translation work and progress is certain to continue. The role of a well-trained human translator will, however, remain necessary to guarantee the ultimate quality of the translation. Along with the traditional skills, translators need to acquire new skills to make good use of the new tools, especially when it comes to setting the right parameters for machine translation (including chatbot translation) on the one hand and to perform adequate post-editing of machine-generated output on the other hand.

It is, indeed, very likely that most translators will eventually switch to MTPE. Those new to the profession will approach translation with a different mindset . They will be the experts who are able to upgrade the raw material supplied by the tools as well as to tweak the tools so that their initial output comes closer to expectations.

As so often when new tools emerge in a profession, it is wise to welcome them but at the same time to retain confidence in the added value of human expertise.

2024-06-27