

HAL panel at NeTTT Conference, 4 July 2022, Rhodes Island, Greece
16:45-18:00 LINDOS ROOM

The HAL panel:

What if we had the perfect machine translation system? A discussion of future scenarios in translation with technology

It is a well-known fact that an increasing use of advanced translation technology has already led to some rather drastic changes in professional processes and workflows. However, due to emerging technologies that seem to offer high-quality translation outputs comparable to what can nowadays only be produced with the involvement of professional translators, even more drastic changes are probably imminent. To address the future consequences of such technological advances for translators, interpreters, trainees, trainers, language services providers, and society in general, panellists are invited to consider this general question: *what would happen if we had the perfect machine translation system?* Possible sub-themes of the panel include, but are not limited to:

- Translation quality: When is a translation product perfect?
- The role of translators/interpreters: Will the future hold roles for professional translators/interpreters in translation processes, and, if so, how will they interact with translation technologies?
- The requirements of translator/interpreter training: If such training is still necessary, what should it comprise, and what should its focus be?
- The role of language service providers: Will such providers still be in demand, and if so, what would their services be?
- Societal impact: How might advancing translation technologies impact on society in general?

PROGRAMME

16:45-17:00	Introduction (Anne Schjoldager and Helle Dam Jensen)
17:00-17:10	“Perfect MT and the Concept of Translation” (Michael Tieber)
17:10-17:20	“When a machine translates, who is the author?” (Maarit Koponen)
17:20-17:30	“What if the translations are too dull to enjoy them? How are we going to train translators to translate better than machines?” (Ana Guerberof)
17:30-17:35	Break
17:35-17:55	Questions & discussion (panelists and audience)
17:55-18:00	Closing (Vilelmini Sosoni)

The panel was organised by the [HAL \(Humans, Applications and Languages\) research network](#).

- Panel coordinators: Anne Schjoldager asc@cc.au.dk, Helle Dam-Jensen hed@cc.au.dk, Kristine Bundgaard kbundgaard@ikl.aau.dk, Tina Paulsen Christensen tpc@cc.au.dk and Vilelmini Sosoni vilelmini@hotmail.com.
- Panel chairs: Anne Schjoldager, Helle Dam Jensen and Vilelmini Sosoni
- Panelists: Michael Tieber, Maarit Koponen and Ana Guerberof

- Time: Monday 4 July 2022 at 16.45-18.00. For information about the venue and any updates, please check the NeTTT conference programme

Panelists' abstracts

Perfect MT and the Concept of Translation

Michael Tieber michael.tieber@uni-graz.at

Issues of machine translation (MT) quality and of translation quality in general remain matters of perspective. In 2018, *Microsoft AI & Research* claimed to have achieved “human parity on automatic Chinese to English news translation” (Hassan et al. 2018). Not only professional translators but also fellow computer linguists were more than sceptical. Läubli et al. (2018) reviewed *Microsoft's* results and demonstrated that their system scored significantly lower compared to translations by human professionals when evaluating whole documents rather than isolated segments. This discrepancy in the interpretation of machine translation performance is connected with different criteria in translation quality. Quality concepts vary significantly not only between Translation Studies and Computational Linguistics but also between machine translation research and MT development in the private sector.

This case shows that developing the perfect MT system is closely linked with questions of translation quality and with our understanding of translation. As MT developers strive for MT quality to achieve “human parity” they create their own understanding of translation quality and migrate the very concept of translation into the realm of machines (O’Thomas 2017). If the perfect MT system were indeed realised, there is no doubt that it would have grave consequences for the work of translation professionals, institutions for translator training, and language service providers. Achieving the perfect MT system would, however, also profoundly change our conception of translation as a process and a craft. In my contribution to the panel, I would therefore like to discuss a scenario in which the workings of machines determine our understanding of translation. I will provide a glimpse into an empirical study on MT developers’ translation concepts. Snapshots from this data material will illustrate how our notion of translation changes when it becomes a posthuman task.

References

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O’Thomas, Mark (2017) “Humanum ex machina: Translation in the post-global, posthuman world”, *Target* 29:2, 284–300.

When a machine translates, who is the author?

Maarit Koponen maarit.koponen@uef.fi

Translation in general challenges the concepts of authorship and copyright. Copyright laws, which protect the expressions of original works, not the ideas contained in those works, already struggle to accommodate translation, where the ideas of the original are expressed in a different language. Although translators hold the copyright to their translations, practices in the field do not always reflect this (e.g. European Commission 2014; Moorkens and Lewis 2020). Beyond questions of authorship in terms of copyright and related concerns of economic ownership, translation involves certain “mental” ownership, where the translator takes responsibility for the text, for example wanting final say on how the translation is edited for publication (Jansen 2019). The issues of authorship, ownership and copyright become increasingly complex with the use of tools like translation memories, where prior translations (each with their own copyright and authorship considerations) are re-used as material for new translations. Machine translation further complicates the situation by expanding the potential re-use of “translation as data” into areas where translation memories have had lesser impact, such as literary translation. Currently, authorship in terms of copyright requires creative, human input: running a text through a machine translation system alone does not give grounds to copyright claim, but selecting and post-editing machine translation suggestions may, depending on the level of editing and whether the translator can “imprint” their creativity on the text (European Commission 2014). How would these notions of authorship and ownership be challenged if the machine translator creates translations indistinguishable from those of a human translator? What is the role of the human translators on whose work the machine relies? In my contribution to the panel, I will discuss questions of copyright and authorship in such a scenario, drawing on recent collaborative research (Koponen, Nyqvist and Taivalkoski-Shilov, forthcoming).

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What if the translations are too dull to enjoy them? How are we going to train translators to translate better than machines?

Ana Guerberof Arenas a.guerberof.arenas@rug.nl

In the last fifteen years, the commercialization of machine translation (MT) and its addition to the localisation industry workflow have created the need to also include in translators' training modules dealing with MT technology (in different paradigms such as ruled-based, statistical or, most recently, neural MT) as well as post-editing practice (Doherty and Moorkens 2013, Kenny and Doherty 2014, Guerberof and Moorkens 2019). The recent developments of NMT technology and the increased quality of its output, the claims of human parity (Hassan et al. 2018), and even the refutation of this parity (Toral et al. 2018), oblige translation trainers to ponder about the future skills required for the next generation of translators. Regardless of assurances that machines are not going to replace translators any time soon (Way 2019), there is a perception in the classrooms that the "raise of the machine" is inevitable, and the fear that training might become irrelevant once fully automation replaces the translator. Moreover, if machines show such effectiveness for standard and simple texts (mainly technical at present) that require, in turn, less human intervention, then translators will need to focus on more unusual and complex texts (King 2019); in other words, translators need to become more creative to show their "advantage" par rapport to machines, and this is supported by recent research on the lack of creativity of NMT and PE texts in literary translation (Guerberof Arenas and Toral 2022). But how can creativity be taught in this context? For anybody embarking on a translation degree, and for translation trainers, it is becoming increasingly clear that different approaches are necessary.

In my contribution to the panel, I propose the creation of a module that teaches creativity to translators through exercises that focus on writing fiction and non-fictional texts with a focus to develop divergent thinking, and hence creativity. This presentation aims to open avenues for discussion and innovation that have creativity and technology as a focus.

References

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