

Personalized MT Systems for Literary Translators

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With increasing research delving into the use of new technologies as a way to assist translators, support the translation process and foster creativity, it has become clear that translation technologies could play a more important role than suggested by the common opposition between machines and creative texts. As is the case with any other existing tool, our opinion is that MT could also help in that regard if it was specifically (re)designed to better fit the particular work of literary translators. Drawing on this, we intend to present a literary machine translation experiment that resonates with existing studies on the subject (Toral and Way, 2018; Matusov, 2019; Kuzman et al., 2019), and which has not been seen for the English-French pair since statistical MT (Besacier, 2014). More than an adaptation to the literary domain, this is also an attempt to develop a customized engine for a specific translator, in a specific genre.

Our system was tested on a fiction novel, where play on words, use of neologisms and references to an entirely fictional universe proved to be particularly challenging. Our personalized system, however, turned out to be much more efficient than its generic counterparts. With twice the performance in terms of BLEU, this human-centric adaptation task showed that MT could be tailored to learn and replicate translation choices, but also reproduce stylistic patterns that go beyond simple lexical equivalences. Rather than stifle, such a tool might conversely stimulate creativity and preserve the translator's voice which are so important with literary texts (Guerberof-Arenas and Toral, 2020; Kenny and Winters, 2020). These results also resonate with another recent experiment with MT and video games and ultimately open a new avenue for MT, closer to the idea of an interactive CAT tool, alleviating the ethical concerns that come to mind with traditional post-editing.

References:

Besacier, Laurent. (2014). Traduction automatisée d'une oeuvre littéraire: une étude pilote. In Philippe Blache, Frédéric Béchet and Brigitte Bigi (eds). Proceedings of TALN 2014 (pp. 389–394).

Matusov, Evgeny. (2019). The Challenges of Using Neural Machine Translation for Literature. In James Hadley, Maja Popović, Haithem Afli and Andy Way (eds). Proceedings of the Qualities of Literary Machine Translation (pp. 10-19).

Guerberof-Arenas, Ana, and Antonio Toral. (2020). The impact of post-editing and machine translation on creativity and reading experience. Translation Spaces 9-2 (pp. 255-282).

Kenny, Dorothy, and Marion Winters. (2020). Machine translation, ethics and the literary translator's voice. Translation Spaces 9-1 (pp. 123-149).

Kuzman, Taja, Špela Vintar, and Mihael Arčan. (2019). Neural Machine Translation of Literary Texts from English to Slovene. In James Hadley, Maja Popović, Haithem Afli and Andy Way (eds). Proceedings of the Qualities of Literary Machine Translation (pp. 1-9).

Toral, Antonio, and Andy Way. (2018). What Level of Quality can Neural Machine Translation Attain on Literary Text? In Joss Moorkens, Sheila Castilho, Federico Gaspari and Stephen Doherty (eds). Translation Quality Assessment: From Principles to Practice. Cham: Springer (pp. 263-287).