



## Reappropriating Translation Technologies: Leveraging Translator Corpora for Individual and Creative Uses

Damien Hansen University of Liège – Grenoble Alpes University

## Abstract

Translation technologies have progressively—albeit profoundly—changed the translation sector in the last two decades, impacting industry standards and expectations, business models, translators' practices and student training, including outside of translation and interpreting programs (Kenny 2017; Guerberof Arenas & Moorkens 2019; Loock et al. 2022). Although the latest types of neural machine translation systems, notably Transformer models (Vaswani 2017), have irrevocably made their way into the daily lives of professionals, the typical discourse is that they remain antinomic to the sort of creative processes to be found in the literary and video game domains for instance. Despite this common preconception, a small community of researchers have recently focused on this very subject (Hansen 2021).

Similarly, our work has focused on challenging this view, starting with computer-assisted translation tools and now drawing a parallel with the latest machine translation (MT) systems, so as to suggest a new approach to the analysis and translation of literary style (Youdale 2020). While our primary aim was to show that it was indeed possible to rely on computer tools for the translation of creative texts, which we have proved to be true with relevant corpora and under the right circumstances, our main and somewhat unexpected finding is that it is even possible to tailor such tools in a way that reflects an individual translator's style, thus opening up a whole new research avenue and possibly a shift of paradigm for machine translation.

Indeed, the current trend within the field of computer science is the development of increasingly bigger systems and datasets—aptly called "very large language models". However, our experience shows that light and individually customized systems are much more efficient for a task as specific and challenging as literary translation. What is more, small language models and frugality might be a good way to address the ecological, ethical and quality concerns of MT (Guerberof Arenas & Toral 2020; Kenny & Winters 2020; Koponen et al. 2022).





In this context, the aim of this paper is to present the results and findings of about three years of research on the topic of literary machine translation, focusing on how we have created our tailored MT system, to what extent this tool has adapted to the style of a specific translator, and what could be the foreseeable developments for such technology. Our main example for this endeavour is the classic fantasy saga *Septimus Heap* (Angie Sage, HarperCollins, 2005–2013) and its translation into French (Nathalie Serval, Albin Michel, 2005–2013). The choice of novels in itself is further subject to a few connotations, as the common idea is that such tools would be best suited for use with "paraliterary" works. Once again, our experiments have revealed a different picture: such fictional texts proved to be particularly challenging for machines due to their inherent mythopoetic nature, but they also clearly illustrate the advantage that we have in reappropriating and rethinking technology for creative and personal uses.

*Keywords*: neural machine translation, literary translation, translation technologies, custom corpora, translator's voice, creativity, fantasy.



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