

Olga Witczak

Adam Mickiewicz University

olga.witczak@gmail.com

Can machine translation boost productivity in human translation? Post-editing vs. translation from scratch.

The claim made by Delavenay and Delavenay in 1960 that “[m]achine translations today are still very imperfect” still holds true. Although machine translation (MT) is deemed unlikely to reach the standards of natural language in the near future (Lewicz 2013: 61), it has become an aid in human translation. The correction of errors in machine-generated content, known as post-editing, has been utilised to increase productivity in translation. While MT is mainly applied in restricted contexts (e.g. product localisation or formulaic text translation) (Hutchins 2010: 15), it can also be incorporated into a translator’s workstation thus becoming a CAT tool and a part of human-computer interaction (HCI) (Folaron 2010: 429; O’Brien 2012: 1).

This paper examines productivity in post-editing and translation from scratch of non-specialist texts. 21 participants of a Translog-II study (4 of them also recorded with Morae Recorder) were all bi- and trilingual translation students. Their task was to either translate or post-edit a hotel website description. The objective of the study was to test two hypotheses. The first hypothesis was that post-editing raw MT output increases productivity by decreasing effort put into the task when compared to translation from scratch. The second hypothesis was that post-editing of a non-specialist text would be of quality at least comparable to the translations from scratch. To test the two hypotheses, quantitative and qualitative data were collected and analysed. It was assumed the decrease or increase of cognitive, temporal, and technical effort in post-editing is reflected in the key logging data and the number of consulted Internet sources. Additional data were collected from a translation quality assessment task in which participants were asked to rate four texts not knowing that two of them were post-edited.

A comparative analysis of Translog files from post-editing and translation from scratch shows that machine translation has the potential to increase productivity in human translation. Answering the question how time gains correlate with translation quality is much less straightforward.

(322 words)

References

- Delavenay Katharine M. and Émile Delavenay. 1960. *An introduction to machine translation*. London: Thames and Hudson.
- Hutchins, John W. 2010. “Machine translation: a concise history”, *Journal of Translation Studies. Special issue: The teaching of computer aided translation* 13, 1-2: 29-70.
- Folaron, Deborah. 2010. “Translation Tools”, in Gambier, Yves and Luc Van Doorslaer (eds.). 2010. *Handbook of Translation Studies*. Vol. 1. Amsterdam: John Benjamins, 429-436.
- Lewicz, Grzegorz. 2013. Can computers replace human translators? An empirical investigation of the quality and usefulness of mechanical translations. [Unpublished MA thesis, Adam Mickiewicz University, Poznań].

O'Brien, Sharon. 2012. "Translation as Human-Computer Interaction", *Translation Spaces* 1, 1: 101-122 (http://doras.dcu.ie/17541/1/Translation_as_HCI_OBrien.pdf) (date of access: 5 Nov. 2014).