<https://doi.org/10.31470/2706-7904-2020-15-81-83>

ETHICAL ISSUES OF NEURAL MACHINE TRANSLATION

Етичні питання нейромашинного перекладу

Serhii Zasyekin

Ph.D. in Linguistics, D.Sc. in Translation Studies, Professor
Lesya Ukrainka Volyn National University (Ukraine)

s.zasyekin@gmail.com

<https://orcid.org/0000-0001-9453-3534>

Solomiia Vakuliuk

BA in Applied Linguistics
Lesya Ukrainka Volyn National University (Ukraine)

vakuliuks@gmail.com

Abstract

The paper is focused on the issues of machine translation ethics. The goal of the present study is to discuss the role of neural machine translation tools from an ethical point of view and their impact on humans. Although traditionally ethics of translation is viewed in terms of sameness and difference, it is human translator who is a party to ethics of translation. It is discussed that translators should rely on technology as a helpful leverage in their job, since it allows them to be faster and more productive. On the other hand, we take an interest in examining the extent to which translation technology tools are given power. Neural machine translators can be unsupervised by humans, therefore viewed as a party to ethics of translation.

Key words: *ethics, translation, neural machine translation.*

Introduction

In today's rapidly growing translation industry, the ethics of machine translation has become a pivotal issue. With the emergence of neural machine translation (NMT) exemplified by Google or DeepL the issue of adopting ethical boundaries for MT has become even more critical. NMT as an advanced tool launched in 2010s, unlike any of the traditional Rule-based (e.g. Transfer-based) or Non-rule-based (Statistical or Phrase-based) MT systems, employs a connectionist approach to data processing. What is specific with NMT system is that the connections (in network) it builds are unique, each time created

anew, therefore unpredictable. What we have at our disposal is input and output texts with no access to NMT's inner intermediate operations.

The goal of the present study is to discuss the role of neural MT tools from an ethical point of view and their impact on humans.

Results

Traditionally, the issue of translation ethics has been dealt in terms of sameness and difference (van Wyke, 2011). The former concept presupposes two trends – foreignizing and domesticating. Therefore, the translators have two ethical duties – either to foreignize the source text for the readers so that the original culture flavor can be appreciated or to “adjust” the text to the target language and culture norms. In both cases translators’ behavior is subject to fidelity and invisibility. The seeds of the tradition of difference in translation were sown in 1970s by Vermeer’s *skopos* and Derrida’s deconstruction theories. The tradition lead to raising the translator’s interlanguage status in cultural translation and their agency in multilingual communication of cultures. But this is all about human translation.

Now, when dealing with MT based on rules or NMT based on corpora training output, the question arises: “Who is responsible for observing the ethics of translation?” Or “Who is the agent of translation?” If the translators use NMT to produce a target version and submit it to their customer/reader after post-editing, then they are viewed as the agents responsible for ethical issues of this translation. By contrast, if the customer/reader uses NMT to get a comprehensible content of the foreign message, then it is the NMT system that should be the agent responsible for ethical issues translation. Here arises a tremendous ethical problem, since we deal with the NMT, namely AI, that can remain unsupervised in self-learning by processing the input and output data. On the other hand, NMT is trained on droves of text arranged in corpora and produced by humans to decode texts the way the human brain works. Therefore, humans indirectly participate(d) in ethical issues of the NMT process. However, if human experts assess NMT quality, then they supervise the ethics of translation. If nobody assesses target texts produced by NMT, then AI by default is “responsible” for ethical translation.

From this standpoint, human sharing a content with the third party (AI, or NMT system) which stores it and subsequently trains itself, target text low quality issues pose serious concerns, even threats to ethics of translation. Undoubtedly, a lowered quality of translations caused by NMT or other MT systems, is also viewed as a breach of authors’ moral rights. In fact, the quality of a given translation product depends on the quality of the process of translation. In her work, Taivalkoski-Shilov (2019) highlights translation quality

as one of the main ethical issues regarding machine(-assisted) translation of literary texts. She claims that translation quality can be investigated as an ethical issue related to translation as a product, as a process, and as an industry.

Conclusions

The role and the use of NMT and CAT tools are expected to increase dramatically over the next few years. We need more information on MT ethical aspects, especially with regard to the significant development of neural MT tools becoming closer to AI. Hopefully, those translators who use these tools will turn the situation to the advantage of all humankind. Still, there is a bundle of controversial ethical problems in the field of translation that need to be addressed ASAP in the coming years. One of them can be verbalized as a paraphrased Roman Taraban's (2020, p. 2552) question with the insertion of similar concepts: Regarding the ethics and social implications of neural machine translation, will smart machine translators have rights equal to those of human translators?

References

- Derrida, J. (1993). *Aporias: dying--awaiting (one another at) the "limits of truth" (mourir--s'attendre aux "limites de la vérité")*. Stanford: Stanford University Press.
- Taivalkoski-Shilov, K. (2019). Ethical issues regarding machine(-assisted) translation of literary texts. *Perspectives*, 27(5), 689-703. <https://doi.org/10.1080/0907676X.2018.1520907>
- Taraban, R. (2020). Limits of neural computation in humans and machines. *Science and Engineering Ethics*, 26, 2547-2553. <https://doi.org/10.1007/s11948-020-00249-7>
- Vermeer, H. (2004). Skopos and Commission in Translational Action. In: L. Venuti (Ed.), *The Translation Studies Reader* (pp. 227-238). London & New York: Routledge.
- Wyke, B. van. (2011). Ethics and Translation. In: *Handbook of Translation Studies Online*. Retrieved from: <https://benjamins.com/online/hts/articles/eth1>