FACULTY OF ARTS AND PHILOSOPHY

LANGUAGE AND TRANSLATION TECHNOLOGY TEAM

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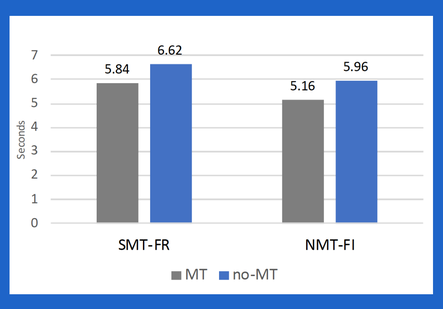
# THE USE OF MACHINE TRANSLATION IN REAL-LIFE PROFESSIONAL TRANSLATION SCENARIOS

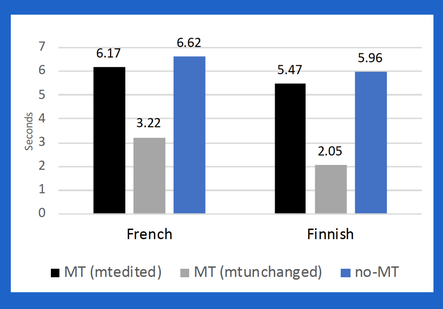
## Research collaboration

European Commission

*Lieve Macken, Daniel Prou, & Arda Tezcan (2020). Quantifying the effect of machine translation in a high-quality human translation production process. Informatics, 7(2).*

Machine translation provides measurable benefits in real-life translation scenarios.
Average speed gain was 14% for NMT-FI and 12% for SMT-FR.
Approving perfect MT suggestions also takes time.



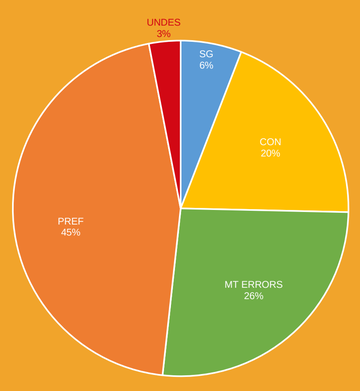

Net effect on overall translation workflow probably lower if other tasks are taken into consideration: initial reading, TM matches, revised segments, self-revision …

Psychological benefits of using Machine Translation:

- "I prefer to translate with machine translation because I have the impression that I have a base, a foundation on which I can build. It's a reassuring feeling."
- "Not having to start from scratch is reassuring."
- "I also like the feeling that I'm not working alone - even if it is just a silly machine that is there to help me."
- "With MT, because I am lazy, and when I see that the segments are already filled, it gives me the impression that the work is already partly done."

## Master's Dissertation

*Luca Desmet (2021). An exploratory study of professional post-edits by English-Dutch DGT translators. Master's thesis, Ghent University (Supervisors: Sonia Vandepitte & Lieve Macken)*




Case study in which post-edits of 9 DGT translators were manually annotated and categorised by means of a purpose-built typology.

- 26% of all post-edits were MT error corrections
- 45% of all post-edits were preferential in nature
- 20% edits to ensure consistency throughout the text
- 6% edits to be compliant with the Dutch Style Guide
- 4% undesirable edits

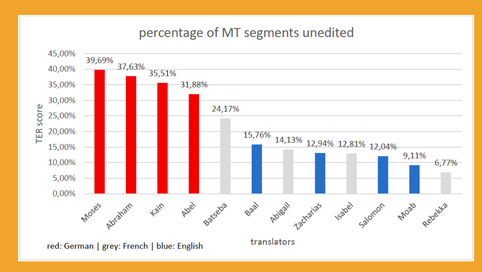
BAAHE Thesis Award &
Nominated for the BKVT Thesis Award

## Master's Dissertation

KBC

*Chun Man (2019) Post-editing at work. A study into a real-life post-editing environment at the KBC language Department. Master's thesis, Ghent University (Supervisors: Lieve Macken & Joke Daems)*

- German post-editors consistently made the fewest changes and tended to accept MT segments the most without modifications.
- More variation was observed in the post-editing behaviour of English and French post-editors.



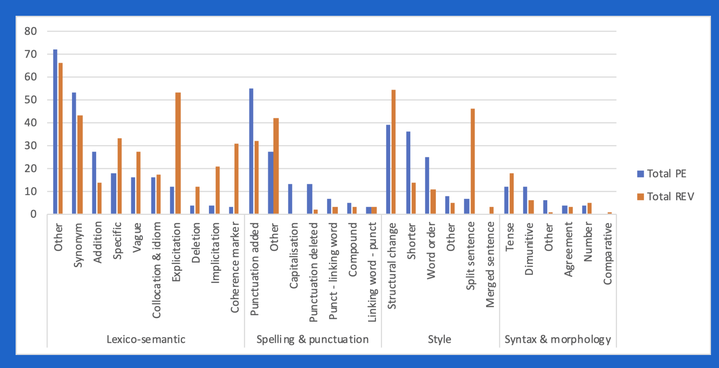

## Research collaboration

NUANXED

*Lieve Macken, Bram Vanroy, Luca Desmet & Arda Tezcan (2022). Literary translation as a three-stage process: machine translation, post-editing and revision. Article submitted for publication.*

SRC: Aunty Alex always managed to explain things in a way that made not very nice feelings go away.
MT: Tante Alex slaagde er altijd in om dingen uit te leggen op een manier die niet zo leuke gevoelens deed verdwijnen.
PE: Tante Alex slaagde er altijd in om dingen zodanig uit te leggen dat minder leuke gevoelens verdwenen.
REV: Maar tante Alex slaagde erin om alles op zo'n manier uit te leggen dat de onprettige gevoelens weer verdwenen.

- More editing occurred during revision than during post-editing
- The types of editing actions were different




European Commission
Marie Skłodowska-Curie Actions

*Developing User-centred Approaches to Technological Innovation in Literary Translation (DUAL-T)*
*Paola Ruffo (Supervisors: Lieve Macken & Joke Daems)*

## Public engagement

### Interviews & articles

- Wat de vertaalapps wel en nog niet kunnen (NRC Handelsblad, July 18th 2017)
- Wat als iedereen elkaar kan verstaan? (NRC Handelsblad Sept 28th 2018)
- Waarom vindt een automatisch vertaalsysteem soms nieuwe woorden uit?, Mysterie van de dag, (Knack, July 2019)
- Als de vertaalmachine plots een konijn van de rabbijn maakt (De Tijd, Oct 2019)
- Vertaaltechnologie is pure wiskunde (interview Filip Michiels, Trends, 29 juli 2021)

## Public engagement

### Talks

- Automatische vertaalsystemen krijgen hersenen, maar maakt hen dat beter? (Gent Vertaalt, Oct 6th 2017, in collaboration with Joke Daems)
- Recent trends in translation technology (The Council of the EU, July 5th 2018),
- Hoe een computer zelf leert vertalen (KBC inspiratiesessie machinevertaling, Leuven, December 17th 2018)
- Neurale automatische vertaalsystemen (ELRC Workshop, Ghent, July 8th 2021)
- Machinevertaling (Fundacja FreeLING, online, December 13th 2021)

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