

All You Wished DeepL Could Do

Post-editing (PE) as a Fundamental Competence in Translators Training

13th International Conference on Professional Communication and
Translation Studies
Timișoara, 30-31 March 2023

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1. Human PE skills and behaviors

Human PE skills

- PE encourages “independent learning, critical thinking and problem-solving skills” (Yamada 2019) which are critical for translator’s autonomy.
- Human translators acquire PE skills gradually, the level of comfort being attained at the end of 100,000 post-edited words (Vasconcellos 1987: 145).
- Earlier studies regarding PE skills mention “long-term commitment, positive attitudes, innovative responses, creative problem-solving, [...] a positive attitude towards the capabilities of MT...” (Vasconcellos and León 1988: 226).
- More recent studies which detail PE skills focus on understanding and evaluating technology, understanding levels of PE (light and full) and PE in practice.

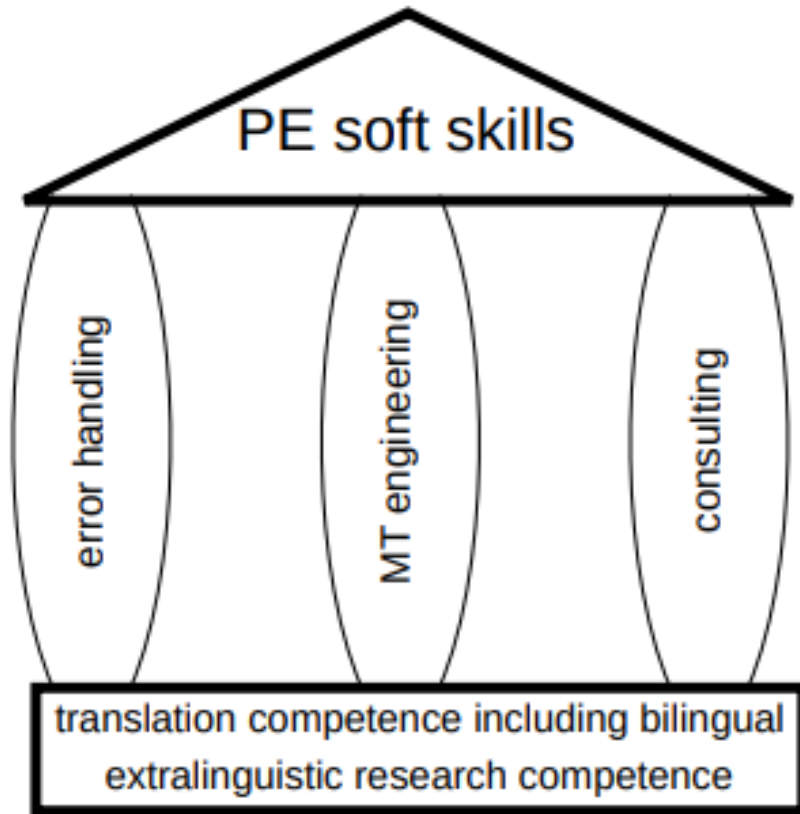


Figure 9.1: PE competence model

(Nitzke & Hansen-Schirra 2021: 70)

PE-related skills (Ginovart & Oliver 2020):

- Capacity to decide when to edit or discard (translating from scratch) an MT result.
- Capacity to post-edit according to PE guidelines
- Capacity to post-edit up to human quality (full PE)
- Capacity to post-edit to a good enough quality (light PE)
- Capacity to pre-edit a source language according to a controlled language
- Capacity to train and tune an MT engine
- Capacity to identify MT output errors
- Capacity to apply the right correction strategy
- Capacity to advise when MTPE is appropriate for a text or project
- Capacity to provide feedback for the MT solution engineers
- Capacity to learn about new technologies

Translators' PE behaviors (RWS):

- deceptively fluent but incorrect translations
- inconsistent or non-compliant terminology
- repetitions (“neural babble”)
- omissions
- mistranslations
- incorrect translation of identifiers (e.g. web or mail addresses, acronyms, or proper or brand names)
- incorrect capitalization
- incorrect register and forms of address

Other studies that also point to translators' PE behaviors:

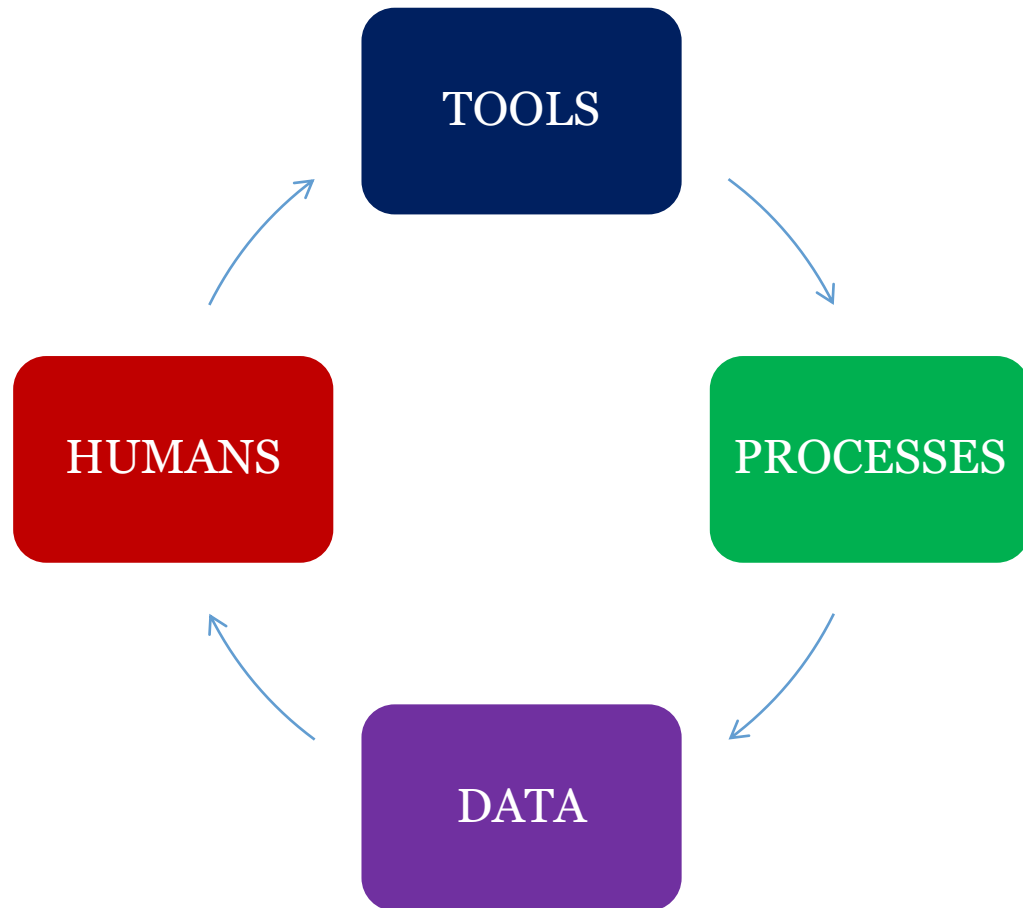
- predicting post-editing time by understanding the styles of post-editing (Góis & Martins 2019)
- cognitive effort in post-editing machine translated texts (O'Brien 2006, Lacruz et al., 2012; Lacruz and Shreve, 2014 quoted in Góis & Martins 2019)
- translators' behavior when post-editing (personal preferences, differences between translators who plan ahead and those who type as they think, crowd-sourced post-editing or creation of tools able to learn from post-editing practices)

2. Recent research data as regards PE training

1. PE training does not meet the needs of the market (Cid-Leal et al. 2019; Jia et al. 2019) or is not adequate, according to LSPs (Ginovart 2020).
2. Post-editors are not always provided with specific guidelines for PE (Ginovart 2020).
3. When training is provided, it is offered mainly by the company translators work for, as well as externally and to a lesser extent by the university (Ginovart 2020).
4. Not all LSPs are aware of all possible training opportunities (GALA, *A Common MTPE Handbook for Academia, Clients, LSPs and Post-Editors*, online).

3. Training content

(online courses offered by the industry)



TOOLS: history (evolution), types of MT (+ neural MT), creating MT solutions, PE integration, testing, innovation, automatic evaluation methods.

PROCESSES: controlled natural language and pre-editing, PE best practices, MT concepts and standards, typical error types, how to spot errors, QA and quality estimation, rates.

DATA: role of content, data security and confidentiality.

HUMANS: translator's perspective, translator's behavior, human evaluation methods, how to provide PE-related feedback for MT engine training, how to Project Manage an MTPE Project.

4. Observational study: use of post-editing in translation didactics

Starting point

- RQ: Are translation trainees able to deliver a quality translation by post-editing machine-translated semi-specialized texts from an L3 to their mother tongue?
- Main objective: analysis of two postedited MT-texts in terms of error diagnosis.

Methodology

- Sample: 22 final year students (mother tongue Spanish)
Bachelor's degree in Translation and Interpreting UMA
German L3, level B1
- Context: Full post-editing of MT (DeepL)
of 2 different German texts from economic articles (9
sentences and 128 words /semi-specialized; 13 sentences
and 169 / general) into Spanish.

Error classification

- Grammar (tense, prepositions, syntax)
- Lexicon
- Terminology
- Meaning transfer/errors in meaning
- Spelling
- Punctuation
- Style

Results

Text:	Inflation schwächer als erwartet (128 words)								
Tool:	DeepL								
Total number of errors:	187								
Error category:	SYNT	PREP	SPELL	STY	PUNCT	LEX	EM	TERM	TENSE
Error frequency	1	4	8	15	19	20	23	48	49
Percentage	0.53%	2.14%	4.28%	8.02%	10.16%	10.70%	12.30%	25.67%	26.20%

Text:	Stagnierende Verbraucherpreise (169 words)											
Tool:	DeepL											
Total number of errors:	181											
Error category:	LEX	PREP	ART	OM	TYPO	ORT	SYNT	PUNCT	TENSE	STY	EM	TERM
Error frequency	0	0	1	2	2	3	7	10	23	26	51	56
Percentage	0.00%	0.00%	0.55%	1.10%	1.10%	1.66%	3.87%	5.52%	12.71%	14.36%	28.18%	30.94%

Interpreting the results

- TERM

Text 1: **das Statistikamt INE** [the Spanish Statistical Office]

Oficina de estadísticas del INE [wrong]

Instituto Nacional de Estadística [right]

Text 2: **Kerninflation** [core inflation]

inflación básica [wrong]

inflación subyacente [right]

Interpreting the results

- EM

Text 1: **Inflation schwächer als erwartet** [Inflation weaker than expected]

Inflación más débil de lo normal [wrong]

Inflación más débil de lo esperado [right]

Text 2: **Weil dieses Ziel über einen längeren Zeitraum nicht mehr erreicht wurde...**

[Because this target had not been reached for quite a while]

...no se alcanzó durante un largo período de tiempo [wrong]

...no se ha alcanzado desde hace tiempo [right]

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Interpreting the results

- TENSE

Text 1: die Experten **hatten erwartet** [the experts had been expecting]

los expertos esperaban [wrong]

los expertos habían esperado [right]

Text 2: Sie **lag im September** bei 1,1 Prozent. [It was 1.1 percent in September.]

Era del 1,1 % en septiembre. [wrong]

Fue del 1,1 % en septiembre. [right]

Answer to RQ

- MT not helpful
- No high-quality translations after post-editing MT

Reason: lack of some of the post-editing skills, according to Ginovart & Oliver (2020: 312) like the “[c]apacity to decide when to edit or discard ...an MT result”, the “[c]apacity to post-edit up to human quality” and the “[c]apacity to identify MT output errors”.

5. Conclusions

Conclusions

- 1) Negative impact of MT.
- 2) Low-level knowledge of the source language and insufficient level of the target language
- 3) It is essential to know the error tendencies of the used MT system. Here: for the language pair DE-ES and this translation direction for general or semi-specialized texts on economics, DeepL tends to make errors in terminology and tense.

Conclusions

- 4) A thorough documentation process is crucial.
- 5) Need in MT and post-editing training and its inclusion in the syllabus.
- 6) MT and post-editing as resources in translation didactics.

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