

# Machine Translation Post-Editing (MTPE) from the Perspective of Translation Trainees: Implications for Translation Pedagogy

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# Table of Contents

01

## Introduction

The purpose of the study

02

## Methodology

Procedure,  
Techniques and tools,  
Participants,  
Limitations of the study

03

## Data analysis

Participants questions,  
Tasks evaluation,  
Interview analysis,

04

## Conclusions and discussion


MTPE course proposal



01

# Introduction

MTPE in Higher Education System in Poland



“new paths should be explored instead of keeping to one approach to translation or to its teaching”

**(González Davies 2004: 4)**

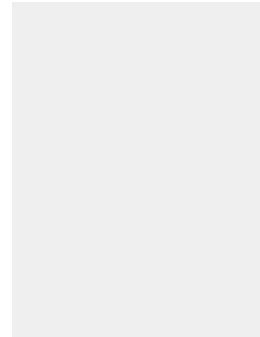
## MTPE in Higher Education System in Poland

| Institution:  | BA/MA studies |     |      | Postgraduate studies |    |
|---|---------------|-----|------|----------------------|----|
|   | CAT           | MT  | MTPE | CAT                  | MT |
| Jagiellonian University in Kraków                     | Yes           | Yes | Yes  | Yes                  | No |
| University of Warsaw                                  | Yes           | Yes | Yes  | Yes                  | No |
| Adam Mickiewicz University, Poznań                    | Yes           | No  | No   | No                   | No |
| Maria Curie-Skłodowska University, Lublin             | No            | No  | No   | No                   | No |
| University of Gdańsk                                  | No            | No  | No   | Yes                  | No |
| University of Białystok                               | No            | No  | No   | No                   | No |
| University of Szczecin                                | No            | No  | No   | No                   | No |
| University of Opole                                   | Yes           | Yes | No   | No                   | No |
| University of Rzeszów                                 | Yes           | No  | No   | No                   | No |
| Kazimierz Wielki University in Bydgoszcz              | No            | No  | No   | No                   | No |
| Jan Kochanowski University in Kielce                  | Yes           | Yes | No   | No                   | No |
| Siedlce University of Natural Sciences and Humanities | Yes           | No  | No   | Yes                  | No |
| University of Łódź                                    | Yes           | No  | No   | Yes                  | No |

# 02

## Methodology

Procedure, Techniques and tools, Participants,  
Limitations of the study



# Research questions

What is the participants' (English Philology and Translation students) attitude towards MTPE?

1

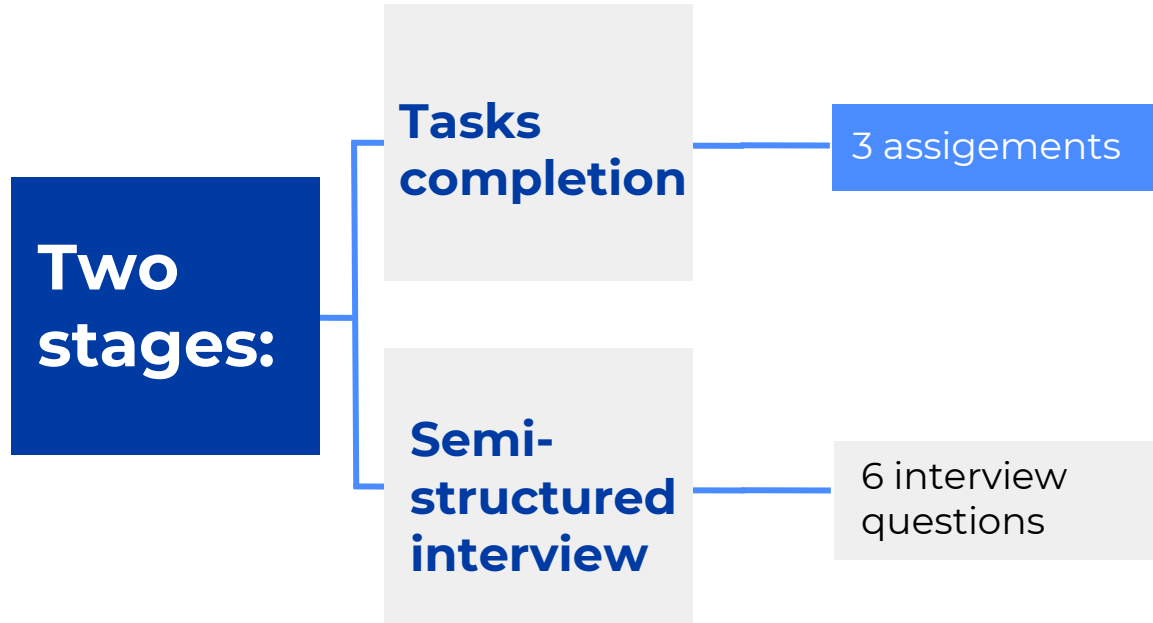
What are the implications for teaching the MTPE process?

2

What is the state of the participants' knowledge about MTPE?

3

# Procedure of the research







# Task 2

## Ex 2 Pre-editing:

From the above original text in English choose from three to five most problematic sentences and try to rewrite them using English Controlled Language rules (pdf file named: Controlled Language Optimized for Uniform Translation (CLOUT)). Then, translate the rewritten versions of the sentences into Polish using the tool you have selected in the previous assignment:

- <https://translate.yandex.com/>
- <https://www.deepl.com/pl/translator>
- <https://translate.google.com/>



## Original text 1:

I am going to start with a challenge. I want you to imagine each of these two scenes in as much detail as you can. Scene number one: "They gave us a hearty welcome." Well, who are the people who are

## Your answer:

| Chosen sentences: | Translation: |
|-------------------|--------------|
|                   |              |
|                   |              |
|                   |              |
|                   |              |
|                   |              |

*Jupi! Second task completed 😊 Now, it will be all fun and games. Open the third file named Post-editing ex 3, and follow the instructions.*

# Controlled Language Optimized for Uniform Translation (CLOUT)

## **RULE 1:**

Write sentences that are shorter than 25 words.

### **Write:**

The author performs the following tasks:

- Collect the necessary information.
- Analyze and evaluate the information.
- Write a structured draft.

### **Do not write:**

Authors will approach any writing project by collecting the necessary information first, and after carefully analyzing and evaluating it, they will create a structured draft.

## **RULE 2:**

Write sentences that express only one idea.

### **Write:**

Authors who optimize their texts for easy comprehension facilitate the translation process. These texts enable human translators and machine translation systems to produce better translation

## **RULE 5:**

Write sentences that have a simple grammatical structure.

### **Write:**

Show that you can organize your thoughts by using a simple sentence structure in your texts.

### **Do not write:**

You, in your texts, to show that you can organize your thoughts, should use a simple sentence structure.

## **RULE 6:**

Write sentences in the active form.

### **Write:**

The program manager will send a summary of questions to the responsible individuals.

### **Do not write:**

A summary of questions will be sent to the responsible individuals.

# Task 3

“MACHINE  
TRANSLATION  
WILL DISPLACE  
ONLY THOSE  
HUMANS WHO  
TRANSLATE  
LIKE MACHINES.”

-Arle Richard Lommel

## Ex. 3 Full post-editing process

Now, you will combine all skills acquired in the two previous assignments:

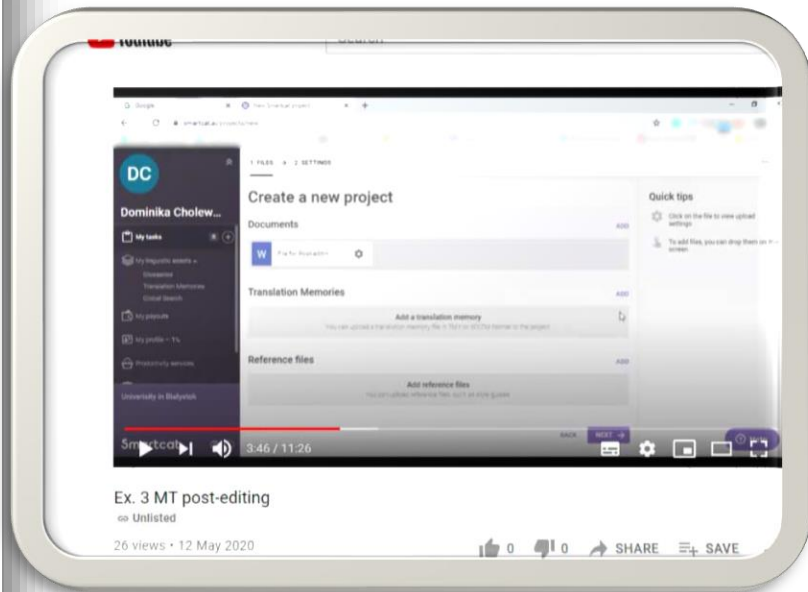
- First, watch an instruction video prepared for this exercise: <https://youtu.be/L30xdvqAF0U>
- Next, create a project in smartcat.ai as it is shown in the video.
- Add the previously made glossary and implement it in your project. Finally, translate the sample text on smartcat.ai platform.
- Send your translation and previous two answers to [domicholewska@gmail.com](mailto:domicholewska@gmail.com)
- Open zoom meeting (on zoom.us) as

scheduled, where I would like to talk to you about the

tasks you have completed and your opinion on machine translation post-editing.

*Thank you*

- Dominika



# SEMI-STRUCTURED INTERVIEW

1. Have you ever used machine translation tools like Goggle Translate? If so, which ones?
2. In the first task, you were asked to choose, in your opinion, the best machine translation and to justify your choice. Were you surprised that the versions of these translations can differ? Were you surprised by the quality of the translations?
3. In the second task, you were asked to translate selected problematic sentences into English using the English Controlled Language rules (ECL) and then translate chosen units employing a preferred tool. In your opinion, was the final version better due to this procedure (ECL rules) or was it not significantly different? Do you find practising these rules necessary? Would that be useful in your work as a translator?

# SEMI-STRUCTURED INTERVIEW

4. In the third task, you were asked to translate an extract from an article using a CAT (Computer-Assisted translation) programme, in this case, available on the SmartCat.com platform. Have you ever employed such a programme? Which one? Did you find the programme helpful? In this exercise, you also used the prepared earlier glossary. Did you find the glossary helpful? Do you think it is worth preparing for translation and post-editing in this way?
5. What is your overall attitude towards the performed tasks? Do you think that you have learned something by completing them?
6. Would you like the post-editing exercises to be included in your educational programme at university?



03

# Data analysis

Three stages

# Procedure of the research



What questions participants asked and what they can tell us.

How the performance of participants can be assessed.

What emerged from the interviews with the participants.

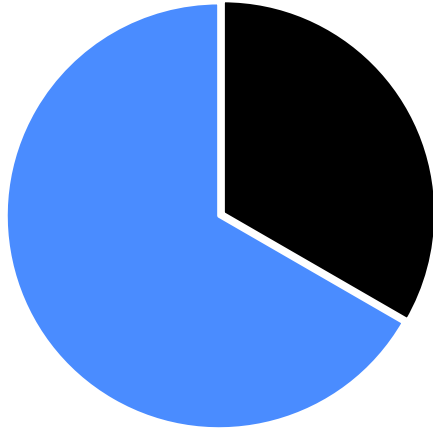


# Participants questions

| Questions asked before tasks completion       | S3   | S4  | S9   |
|---|--|---|--|
| Questions concerning the procedure of Task 2. | Hey, quick question, should I enter the already corrected sentences and their translation in task two? |   | Do I understand the task 2 correctly? I have to choose some of these sentences and rewrite them in my own way with the instructions, but still in English, and then put them into the translator, yes? |
| Questions concerning ST in Task 3.            | (...)I have a question, in catsmart we translate all the text that is on the nyt site?                 | I refer to exercise 3, should I use the sentences from exercise 2? Or should I just do exactly as in the instructional video? | Where can I find the content of the task 3?  |
| Questions concerning the procedure of Task 3. |  | So, in general we don't show any creativity and we do exactly what we see on the video, yes?                                  | Can I split sentences if I want to?  |

## Tasks evaluation: Task 1

Percentage distribution of the chosen MT output.

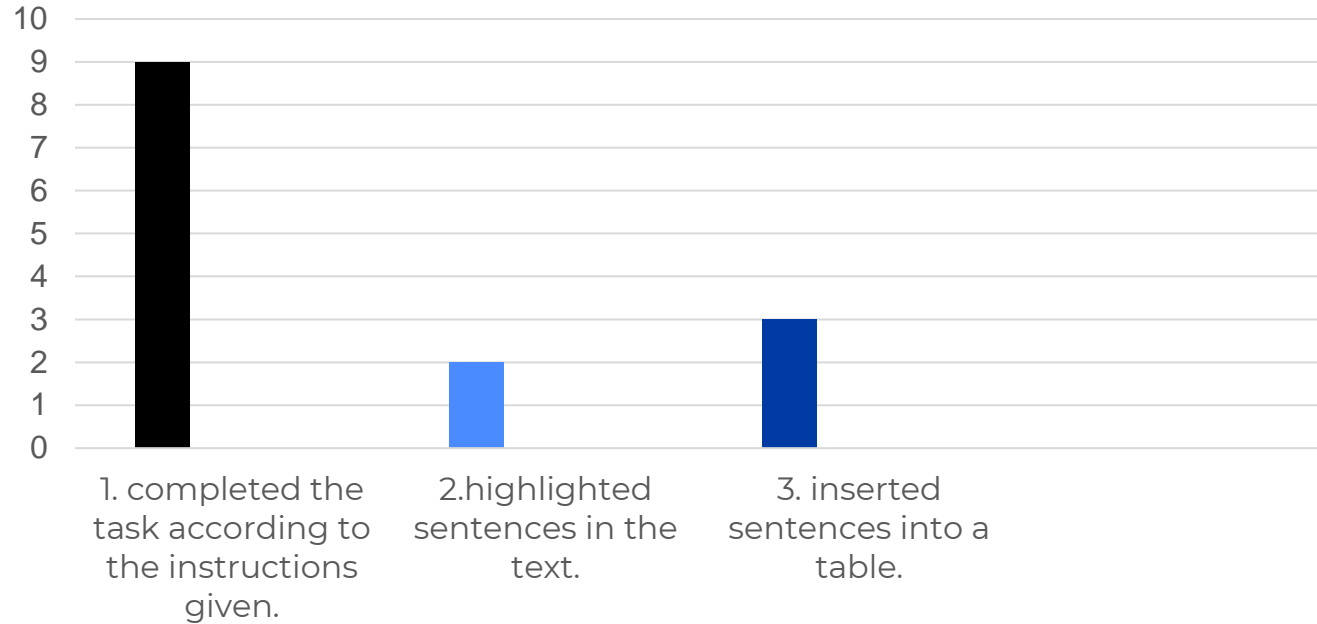


- 1. Yandex Translate
- 2. Google Translate
- 3. DeepL

|                       | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 |
|-----------------------|----|----|----|----|----|----|----|----|----|
| Stylistics            | 1  | 1  |    |    |    |    |    |    |    |
| Readability           | 1  | 1  |    | 1  |    | 1  | 1  |    |    |
| Consistency /accuracy |    |    | 1  |    |    |    | 1  |    |    |
| Grammar               |    |    |    |    |    |    | 1  | 1  |    |
| Errors                |    | 1  |    |    | 1  | 1  |    |    | 1  |
| Vocabulary            |    |    |    | 1  |    |    |    |    |    |

## Tasks evaluation: Task 2

The number of participants who



## Tasks evaluation: Task 3

| Errors  | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 |
|---|----|----|----|----|----|----|----|----|----|
| firma SpaceX<br>wystrzelił<br><u>[orig: SpaceX<br/>launched]</u>                    | 1  | 1  | 1  | -  | 1  | 1  | 1  | 1  | -  |
| partię swoich<br>satelity<br><u>[orig: the first<br/>batch of its<br/>Starlink]</u> | 1  | 1  | 1  | -  | 1  | 1  | 1  | 1  | -  |

(1) S4: [So in general we don't show any creativity and we do exactly what we see on the video, yes?]

(2) S9: [Can I split sentences if I want to?]

## Interview analysis: Question 1

| Number of participants familiar with enumerated machine translation tools |   |
|---|---|
| Google Translate  | 9 |
| DeepL   | 4 |
| SmartCat  | 1 |
| PONS  | 1 |

# Interview analysis: Question 2

| Interview Question 2   |     | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 |
|--|-----|----|----|----|----|----|----|----|----|----|
| Were you surprised that the versions of these translations can differ? | Yes |    |    |    |    | 1  | 1  |    |    |    |
|  | No  | 1  | 1  | 1  | 1  |    |    | 1  | 1  | 1  |
| Were you surprised by the quality of the translations?                 | Yes | 1  |    | 1  | 1  | 1  | 1  |    |    | 1  |
|  | No  |    | 1  |    |    |    |    | 1  | 1  |    |







## Interview analysis: Question 5

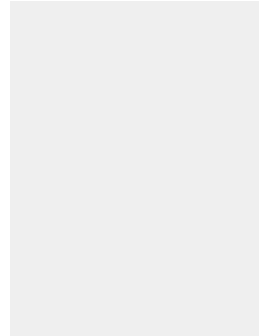
| Participants' attitude to and comments on the tasks performed                             | Number of participants                         |
|---|--|
| <b>Beneficial experience</b>  | 9  |
| <b>in terms of:</b>   | • familiarising themselves with CAT software 7 |
|   | • acquiring new skills 1                       |
|   | • improving skills 1                           |
| <b>Challenging experience</b>   | 1  |
| <b>Experience that showed the importance of the translator's role in the MTPE process</b> | 1  |

## Interview analysis: Question 6

| Interview Question 6  | Number of participants   |
|---|--|
| Would you like the post-editing exercises to be included in your educational programme at university? | Yes 9  |
| Other comments:   | <ul style="list-style-type: none"><li>• it would help in career as a translator 5</li><li>• it would be interesting 3</li></ul>            |
| Other comments:   | <ul style="list-style-type: none"><li>• it would be an adaptation to today's technologically developed approach to translation 3</li></ul> |
| Other comments:   | <ul style="list-style-type: none"><li>• it would improve and simplify the translator's work 2</li></ul>                                    |
| Other comments:   | <ul style="list-style-type: none"><li>• it is odd that there is no class concerning CAT tool 1</li></ul>                                   |

# 04 Conclusions and discussion

(MTPE course proposal)



# Conclusions

- the participants evaluate the training on post-editing of machine translations as positive and beneficial,
- they would like the MTPE training to be included in the educational programme, as it would make their future work as a translator easier, simpler and more efficient
- they see the MTPE course as a positive adaptation in the educational system, corresponding to today's technologically developed approach to translation,
- the application of ECL principles, the CAT programme and terminology management support translator's work,

# Conclusions

- changes should be made to both the instructions and the structure of Task 3, ideally breaking it into separate exercises,
- the tasks should be carefully designed, taking into account each stage of the student's work,
- the ECL rules could be enriched with the issue of metaphors or other phraseological compounds,
- although all the participants are familiar with MT tools, their knowledge of the subject is not extensive.

# Limitations

- the results are not generalisable beyond the participants studied,
- students' experiences (from universities that have at least CAT in their curriculum) with MTPE and the tools discussed may be different from those reported in this study,
- it is also worth noting that since the main hypothesis of the study is the need to integrate MTPE training into the university teaching system in institutions where MTPE courses are already taught, such a study would not be justified.

# Future research directions

- introduction and analysis of the MTPE course,
- adaptation (or construction) of specific guidelines and principles (MTPE) for different disciplines (literary, scientific, journalistic, legal and medical texts)

# MTPE course proposal

- Click on 'Setting on the left' (⚙️)
- From the list of MT, choose every possible option to see the differences later
- Click SAVE
- Click FINISH
- Under the segment Documents, click OPEN next to the name of the created project
- Translate the first unit using MT suggestions on the right
- Confirm the translation by clicking CTRL+ENTER
- Post-activities:
  - Discussion (5min): the participants evaluate their experience with the CAT tool and comment on Task 3. It is also time for any questions the participants may have after using the CAT tool for the first time.
- Supplementary sources of information: "Computer-aided translation" Lynne Bowker, Desmond Fisher, Published online: 28 October 2010 <https://doi.org/10.1075/hts.1.comp2>.

## Lesson 7

- Subject: CAT part two: CAT functions/possibilities and finishing the first project
- Objective: the class aims to
  - continue to develop the participants' skills and extend knowledge on CAT programmes;
  - familiarise the participants with CAT functions.
- Method: game, translation - individual work.
- Materials:

1. Introduction to MTPE process: MT tools
2. Three types of MT tools. Rules-based machine translation, Statistical machine translation, Neural machine translation.
3. MT - Finding and naming errors.
4. Controlled Language (CL) rules for MT: create your own list of pre-editing rules.
5. Pre-editing: creating a glossary
6. Introduction to CAT: possibilities, different tools
7. CAT part one: Creating CAT project
8. CAT part two: Creating and implementing glossary
9. CAT part three: working on project with implemented glossaries
10. CAT part four: downloading texts and checking
11. CAT part five: Translation memories
12. Creating new project with glossary and TM
13. Competition: Human VS MT
14. Website MT translation
15. MT spoken translation – implications for future development



# Thank you

Do you have any questions?

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