

## *MT Evaluation Protocol as an educational tool for teaching machine translation: experimental classes*

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### ABSTRACT

This article presents experimental classes devoted to machine translation (MT) with the application of MT Evaluation Protocol, conducted with the participation of 45 students at the University of Silesia. The teaching scenario involved theoretical discussion of MT solutions, followed by structured testing of machine translation, during which the students could verify the quality of the MT output and come up with their own conclusions about the utility of MT during translation. The educational objective was to provide the students with theoretical and practical knowledge of MT tools, based on testing and inductive learning. The success of the classes was assessed on the basis of a survey distributed after the classes among the participants. Section 1 of this article briefly discusses the role of machine translation in translators' work, sections 2 and 3 present methodology and a detailed scenario of the classes devoted to MT, and sections 4 and 5 – the results of the survey as well as conclusions and recommendations for future educational projects involving this topic.

**Keywords:** machine translation, automated translation, translator training

### 1. Introduction

Introduction of machine translation (MT) into the teaching schedule is a source of debate among the educators in the field of translation. Unlike CAT tools, which have become standard professional translators' workstations, thus are commonly presented to students during classes, MT does not form a regular part of university courses (O'Brien, 2002). While it is enthusiastically embraced by some translation teachers, others look at MT with a certain level of scepticism. Some teachers decide not to discuss MT as a potential translators' tool, others try to discourage students from its use, or explicitly ban MT during translation classes, assuming that it may disrupt a learning process<sup>1</sup>. Such reasoning does have its grounds. If presented to students without a thorough comment, machine translation may be perceived by trainee translators as a tool that "does all the work for them", thus releases the students from many chores related to translating a text (Sycz-Opoń & Gałuskińska, in press). MT engine indeed produces translation at an instant, yet the

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<sup>1</sup> Opinions gathered during conferences: *Tłumacz a komputer 2* (Wrocław, 25<sup>th</sup>-26<sup>th</sup> October 2014), *Language And Law – Traditions, Trends & Perspectives* (Białystok, 11<sup>th</sup>-12<sup>th</sup> June 2015), *1<sup>st</sup> CTER Congress* (Kraków, 14<sup>th</sup>-16<sup>th</sup> March 2016).

output contains numerous errors that require manual correction made by a human translator – the so called *post-edition*<sup>2</sup> (Wilks, 2008; Fiederer & O'Brien, 2009; Sycz-Opoń, 2014). The errors differ from the ones committed by humans, thus are difficult to spot by inexperienced post-editors, which may result in poor quality of texts translated with the assistance of MT (cf. O'Brien, 2002; Calude, 2003; Guillou, 2013; Sycz-Opoń, 2014; Sycz-Opoń & Gałuskina, in press).

On the other hand, MT technology is slowly, but systematically gaining recognition among translators. Professionals admit its use during their work (Fulford, 2002 and Fulford & Granel-Zafra, 2004). It has also been incorporated into the majority of CAT tools, e.g., Wordfast, SDL Trados and MemoQ and used by numerous large companies and institutions, such as Xerox, Ford, General Motors, European Commission, Pan American Health Organization (Hutchins, 2001; Hutchins, 2010). Therefore, it seems that this topic should not be omitted in a translation course that is meant to be comprehensive. This view is shared by Somers (2001: 26) who comments:

It is not contentious to claim that trainee translators and other professional linguists need to understand what MT and related software can and, perhaps even more important, cannot do. Translators need some insight into how MT works, why it is difficult, what kind of translation tasks MT is appropriate for, what alternative computational tools are available and how to integrate them into the workflow.

Bowker (2002: 14) adds that “the gap between technological advances and pedagogical practices must be close”.

Moreover, ignoring MT during translation classes does not guarantee that the students will not use this technology in the privacy of their homes or even during classroom tasks. They might use machine translation without teacher's knowledge, and since they received insufficient training, it is highly probable they would do it in an inappropriate manner. Therefore, our view is that rather than turn a blind eye on MT technology, it seems more reasonable to discuss MT as a potential translators' tool in a controlled classroom environment. Yet what rises our concern is how to conduct classes devoted to machine translation, so that they would not reinforce students false presumptions about MT (and that may happen if the topic is presented superficially), but provide unbiased information about MT's strengths and limitations. In an attempt to answer this question we designed a scenario of classes devoted to automated translation, then carried out the classes based on the proposed scenario, and obtained feedback afterwards from the students in the form of a survey. The methodology of the study is presented in section 2 of this article, the detailed scenario of the classes in section 3, the

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<sup>2</sup> *Post-edition*, a term often used with reference to correction of the MT output, can be understood in two ways. In its first sense, post-edition means correction and edition of the MT output in the target language, outside CAT tool and often with no reference to the original text. This form of post-edition is conducted solely on the level of target-language text. Post-edition understood in this way can hardly be classified as a form of translation. For that reason art.1 of the norm ISO 17100:2015: *Translation Services - Requirements for Translation Services* excludes such activity from its definition of translation, stating that “the use of raw output from machine translation plus post-editing is outside the scope of this International Standard”. However, post-edition can also be understood in its broader sense as part of translation process, “where a translator sees and uses a suggestion from a machine translation engine within a CAT (computer-aided translation) tool” (art. 2.2.4 of the norm ISO 17100:2015). In such circumstances, MT is perceived as any other additional resource available in CAT tools that facilitates the translation process. In this article, post-edition is understood in its second meaning.

evaluation of the classes can be found in section 4 and the concluding remarks in section 5 of the article.

## **2. Methodology**

### **2.1 General scenario of the classes**

Translation with the assistance of MT differs from translation in a traditional sense (O'Brien, 2002; Sycz-Opoń, 2014). Here, the translator has to post-edit the text generated by the machine, not translate from scratch. On the surface, it may look like an attractive alternative to traditional translation. There is no need for extensive typing on a keyboard and many ready-made translation solutions are already included in the translation offered by the machine. Yet during the post-editing of the MT output one can see that the text produced by the machine contains numerous errors (some of them difficult to notice), whose correction takes time and effort.

The main idea of the classes was that the above-mentioned characteristics of the MT post-edition process should surface during the practical testing of the technology. Thus, the scenario of the classes was based on inductive learning, i.e. "learning through studying examples (...) and finding underlying patterns and rules" (Nunan, 2002). The teaching session was divided into three stages:

1. Theoretical presentation of the topic, followed by the discussion about MT.
2. Presentation of Google Translation Toolkit and practical testing of MT with the use of MT Evaluation Protocol.
3. Discussion based on students' conclusions.

The planned duration of the classes was three hours. The experimental classes took place in the computer room at the University of Silesia.

### **2.2 Participants**

The classes devoted to MT were carried out at the University of Silesia with the participation of 45 students. The participants were the students of MA English translation course, MA French CAT tools course and MA Spanish CAT tools course. The classes constituted part of students' regular courses. They were informed about the experimental character of the classes and declared willingness to participate. The students were not graded at any stage of the classes, since the aim of the classes was to familiarise them with the new technology and give them the opportunity to form their own independent opinions about it.

An important factor determining the choice of the participants was their knowledge and experience with translation. MT can be presented to the students only after they have been well-educated in translation theory and have gained necessary experience in translation. As O'Brien (2002: 105) notes, "it is impossible to say exactly where a course on post-editing fits in. However, (...) successful post-editing requires a high level of confidence in the post-editor's own work". As the study by Sycz-Opoń & Gałuskińska (in press) revealed, to post-edit the MT raw output one needs to have skills and knowledge comparable to the ones possessed by professional translators. Only then one is able to detect all errors contained in MT raw output, and on that basis assess its utility in translation. For that reason only the students of MA courses (who had attended translation classes for at least three semesters) were asked to participate in the experimental classes.

### **2.3 Selection of texts**

The texts were specially prepared for the task of post-edition. Different sets of texts were prepared for the English, Spanish and French students, based on the specific content of each course. They consisted of short fragments (between 50 and 150 words) representing different genres (e.g., an editorial, an agreement, an encyclopaedia entry, a manual, a scientific paper, a novel, a textbook, a medical history report). Such wide selection was necessary, because the quality of the MT output varies depending on numerous factors, e.g., the popularity of a language pair, the popularity of a genre, the complexity of a text and a topic, and the specificity of a target language (Calude, 2003). Therefore, translation of only one type of text during classes would lead to biased opinions about MT quality and its utility during translation. For the same reason the students participating in the classes were given the chance to translate from and into their native language. Only by translating samples of various genres from and into their mother tongue the students could obtain a broad view of MT quality and discover the factors influencing MT's performance.

### **2.4 MT Evaluation Protocol**

MT Evaluation Protocol found its use during the empirical part of the classes, when the students were asked to find and correct all the errors contained in MT raw output. The need for this tool surfaced during the previous study of a similar character by Sycz-Opoń & Gałuska (in press). During that study the students failed to detect many errors contained in the MT output and left them uncorrected, presumably because the errors committed by the machine, e.g., wrong names or dates, in general do not resemble the errors that are typically made by a human translator. The students did not realize their own omissions and finished the task of post-editing with the false impression that the quality of MT output was better than it actually was.

The Protocol was introduced into the classes to help students discover the errors in MT output. The Protocol consisted of two parts (see Appendix 1). The first part was intended for registering all types of errors found in the MT output. To facilitate proper identification of errors the Protocol contained a list of various types of errors in the form of a checklist. The students had to tick the right option, or if it was missing, record the error in the field named "Other." The second part contained a few questions referring to the post-editing process, which the students were asked to answer after they had finished MT post-edition.

The Protocol was designed to serve several educational purposes. First, its aim was to direct students' attention to various types of errors appearing in the translation generated by the machine, and in this way force the students to conduct a detailed analysis of MT quality at the level of each segment. Secondly, the role of the Protocol was to help students reflect on various aspects of the work with MT. They were to realise that post-edition of MT differs from traditional translation and requires a different set of skills (among others, one needs to have highly developed perceptiveness and attentiveness in order to conduct a minute examination of the text generated by the machine).

### 3. Detailed scenario of the classes

#### 3.1 The first stage of the classes

First, the students were provided with the explanation of what machine translation is and how it works. They were informed about the historical background of MT<sup>3</sup> (the evolution of MT technology from rule-based, through corpus-based to mixed MT systems<sup>4</sup>) and various applications of MT<sup>5</sup> (in tourism, commerce, administration, online publications, etc.), with the main focus on the applicability of MT in professional translation<sup>6</sup>. After this brief introductory lecture, the classes took the form of a discussion, with active participation of the students, who were asked to express their intuitions about the following issues:

- Have you tried translation with the assistance of MT? If not, can you imagine translating texts with the assistance of MT?
- In general, how would you describe the quality of machine translation?
  - What features of MT make it a useful tool for a translator?
  - Is post-editing of MT raw output easy? What are the possible difficulties?
  - What are the most common errors in MT raw output?
  - Can MT find application in all types of translation?
  - What factors determine the quality of MT output (and at the same time its potential utility for translation)
  - What skills are required for effective MT post-edition?

Also, during this stage of the classes, the students filled in a short online survey (consisting of three questions) about their previous experience with machine translation. The first question was: *Have you used MT during translation before?* Then, the students were asked about the reasons for using or not using MT. The results are presented in Figures 1, 2 and 3.

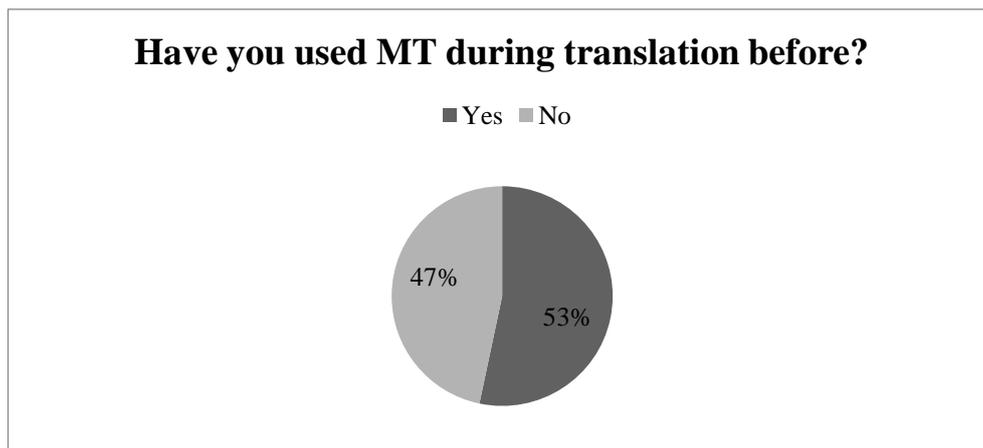
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<sup>3</sup> More about the history of MT in Hutchins, 2001; Hutchins, 2007; Gaspari & Hutchins, 2007; Chan, 2015.

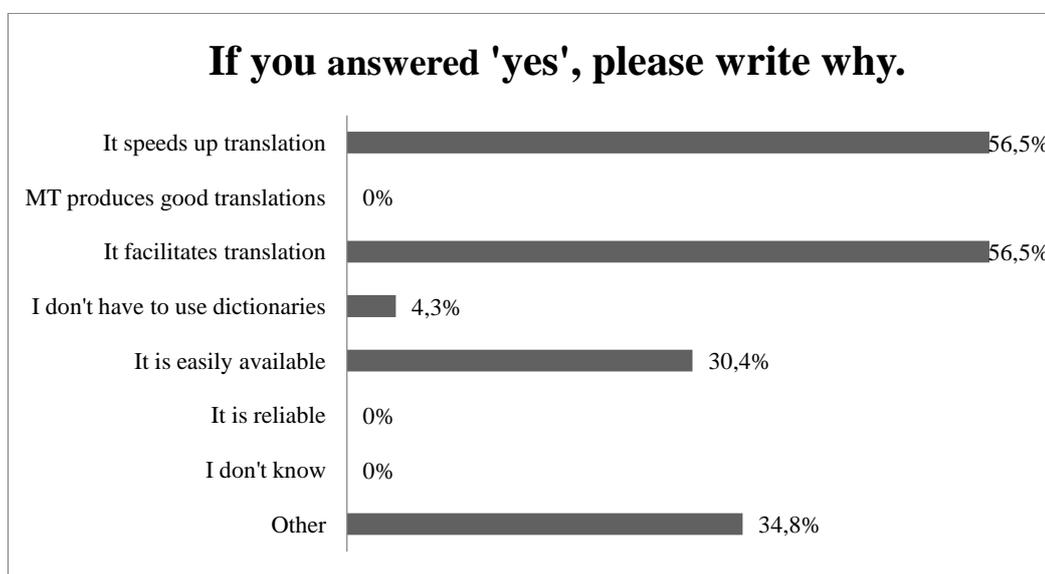
<sup>4</sup> The description of each type of MT technology can be found in Somers, 2003; Bijimol & Abraham, 2014; Chan, 2015.

<sup>5</sup> More about the practical applications of MT in Calude, 2003; Hutchins, 2005; Gaspari & Hutchins, 2007; Bogucki, 2009;

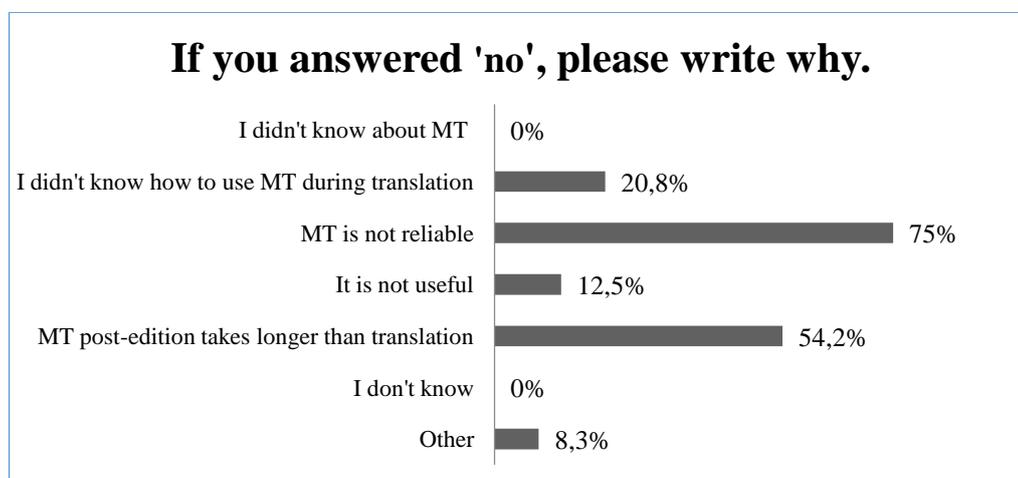
<sup>6</sup> The information about the use of MT in professional translation can be found in Hutchins, 2001; Bogucki, 2009.



**Figure 1** Participants' answers to the question: *Have you used MT during translation before?*



**Figure 2** Participants' reasons for using MT

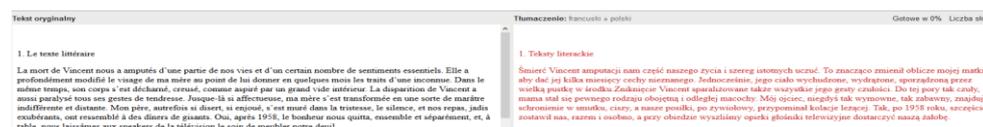


**Figure 3** Participants' reasons for not using MT

The survey (and the classroom discussion) revealed two drastically different approaches to MT among translation students. Some of them exhibited enthusiasm towards this technology, arguing that it facilitates and speeds up the translation process, while others were highly critical, saying that traditional translation is faster and more accurate than MT post-edition. What all their answers had in common was the overgeneralized and stereotypical view of machine translation. The students assessed MT quality globally as generally good or bad, yet were not able to comment on individual aspects of MT (syntax, lexis, grammar, etc.)<sup>7</sup>. Their assessment of MT was oversimplified, because they did not have knowledge of how MT works and how such critical assessment of MT quality should be conducted, i.e. what aspects should be taken into account and how they should be evaluated.

Therefore, the main objective of this part of the classes was to make students reflect on MT post-edition and to raise their awareness of the numerous complexities of this process. The role of the teacher was to pose the questions and motivate the students to answer (or make a guess) on the basis of their intuition or knowledge, in this way triggering reflection on the topic. The teacher was not supposed to resolve students' doubts, rather to raise their curiosity. The students were to discover the advantages and disadvantages of MT post-edition on their own, during further stages of the classes. Moreover, since the benefits of MT for translators are still a matter of debate rather than an established fact, the tutor's positive or negative attitude towards MT was not to be indicated. Instead, the tutor encouraged the students to develop their own opinions on the basis of experience gained later on during the classes.

After discussion, the students were presented with Google Translation Toolkit. This is a very basic, free-of-charge tool designed to assist in professional translation of texts. Like in every other CAT software, here the text is automatically divided into segments. The original text is presented on the left, and the translation on the right (see: Figure 4). The programme automatically generates translation of each sentence, which appears once the segment is opened. The translation is generally imperfect, thus the role of the translator is to track down and correct the errors appearing in the MT output, in other words, to post-edit it.



**Figure 4** A screenshot of Google Translator Toolkit: machine translation of an excerpt from the book *Une vie française* by Dubois (2004)

### 3.2 The second stage of the classes

During the second, empirical stage of the classes, the students were given the chance to perform translation with the assistance of Google Translation Toolkit, and in this way find answers to some of the questions raised at the beginning of the classes. The precise scenario of the task was as follows: the students were divided into pairs. One person in each pair was asked to translate a set of Polish texts into a foreign language, which in practice meant post-edition of the MT output. The other person was assigned the role of a recorder and was asked to look closely at the

<sup>7</sup> Similar observations about the translation trainees knowledge of MT were made in the study by Sycz-Opoń & Gałuskińska (in press).

post-edition process and record information about the types of errors appearing in the MT output on the MT Evaluation Protocol.

Tekst 1		
Kategoria błędu	Rodzaj błędu	Liczba błędów
<i>Gramatyczne</i>	niepoprawna pisownia	
	błąd akcentu (brak akcentu lub niepoprawny akcent)	
	błąd elizji (brak elizji lub niepoprawna elizja)	
	niepoprawnie utworzone słowo (błąd słotwórczy)	
	błąd czasownika (niepoprawny czas lub tryb)	+
	niepoprawna kategoria gramatyczna (np. czasownik zamiast rzeczownika)	++
	błąd zaimka (brak zaimka lub niepoprawny zaimek)	++
	niepoprawne użycie wielkiej/malej litery	
	błąd rodzajnika (brak rodzajnika lub niepoprawny rodzajnik)	
	ominięcie jednego z członów negacji	
błąd uzgodnienia (brak uzgodnienia lub niepoprawne uzgodnienie)	+++	
<i>Składniowe</i>	niepoprawny szyk zdania	
	błąd spójnika (brak spójnika lub niepoprawny spójnik)	
	niepoprawna interpunkcja	
<i>Leksykalno-semantyczne</i>	niepoprawne tłumaczenie jednostki leksykalnej	+++++
	brak tłumaczenia jednostki leksykalnej	+
	brak przypisu tłumacza tam, gdzie to konieczne	

**Figure 5** A sample MT Evaluation Protocol filled in during the post-edition of a text from Polish to French

Once the task was finished the students switched their roles. The person which had been previously responsible for the recording was later on asked to take up the role of a post-editor of the remaining texts. In this way both students in each pair had the chance to practice post-editing of MT output. The direction of translation also changed. The second person in a pair translated the set of texts from a foreign language into Polish.

The teaching strategy applied in this part of the classes is based on the idea of inductive learning. It was chosen for several reasons. First, it was assumed that the classes based on self-discovery would generate more interest on the part of the students than theoretical lecture or discussion. Moreover, in such classes the teacher does not impose any opinions on the students, but allows them to test their presumptions about MT themselves. Since the professionals are divided in their opinions about MT's usefulness in translation, that seems to be the most reasonable approach. Also, the students are more likely to accept and remember their own conclusions than the opinions given by the teachers. Yet for the classes to become successful, it is crucial that the participants carry out MT evaluation in a structured way. They need to know exactly what aspects of MT they are asked to investigate. Their mere impressions about MT's quality might not be sufficient to formulate valid conclusions. That is why the MT Evaluation Protocol was introduced into the empirical part of the classes. This tool should draw students' attention to various aspects of the post-editing process, and motivate them to monitor MT quality in a systematic manner. The students should also have an impression of being the researchers who arrived at the answers through empirical experimentation, not passive receivers of information.

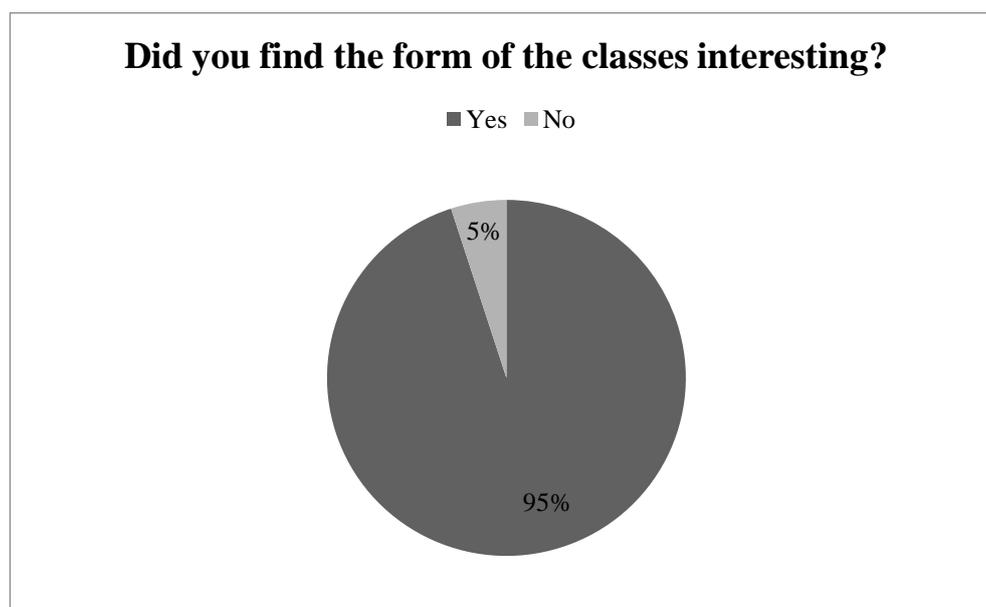
### 3.3 The third stage of the classes

Once the MT testing was concluded, the statistical data gathered by all the participants in the Protocols were added together in order to provide the overall

picture of the most typical errors contained in the MT output<sup>8</sup>. Then, on the basis of the statistics and their own observations the students had the chance to voice their opinions about MT's quality and its utility in translation. They were asked the same questions as the ones posed at the beginning of the classes. This time, however, they could formulate their opinions on the basis of experience gained during MT testing. Great care was taken to assure that the teacher's attitude towards MT is not revealed, so that the students felt free to express their true opinions about this technology. Also, for the same reason, the students' reflections about MT were not graded. This conclusive part of the classes appears to be the most important one, because this is probably the stage when the students formulate their final opinions about machine translation. If the discussion is well moderated by the teacher, the students have the chance to discuss numerous aspects of using MT, listen to the views of their peers, come to their own realisations, and in this way systematise their knowledge of MT.

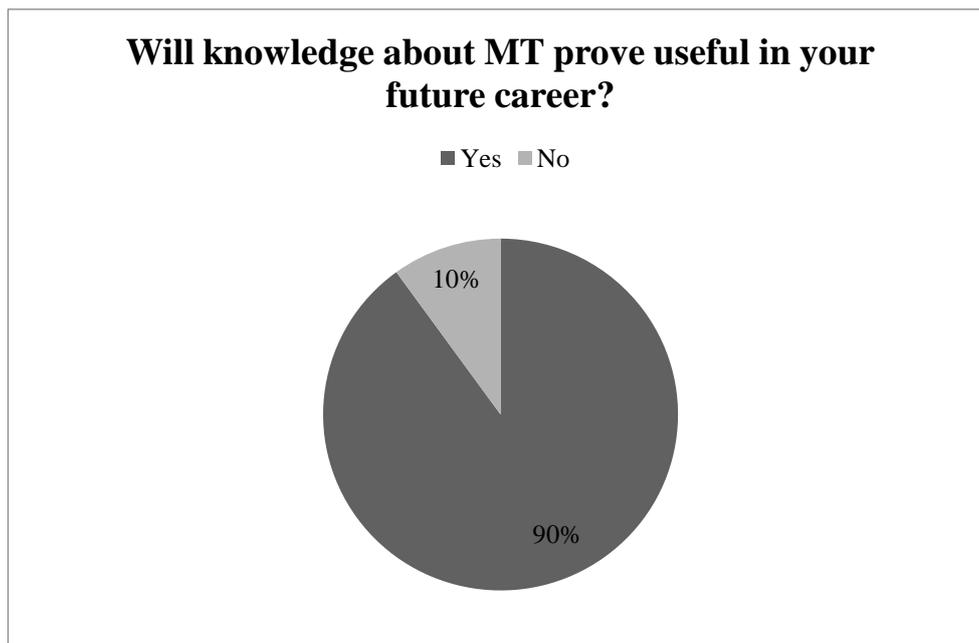
#### 4. The evaluation of the classes

Right after the classes devoted to MT the students were asked to conduct an online survey. The aim of the first part of the survey was to find out how the students perceived the classes. The second part of the survey investigated whether the students' understanding and attitude towards MT changed as a result of participation in the classes. Figures 6 to 11 present the results of the survey.

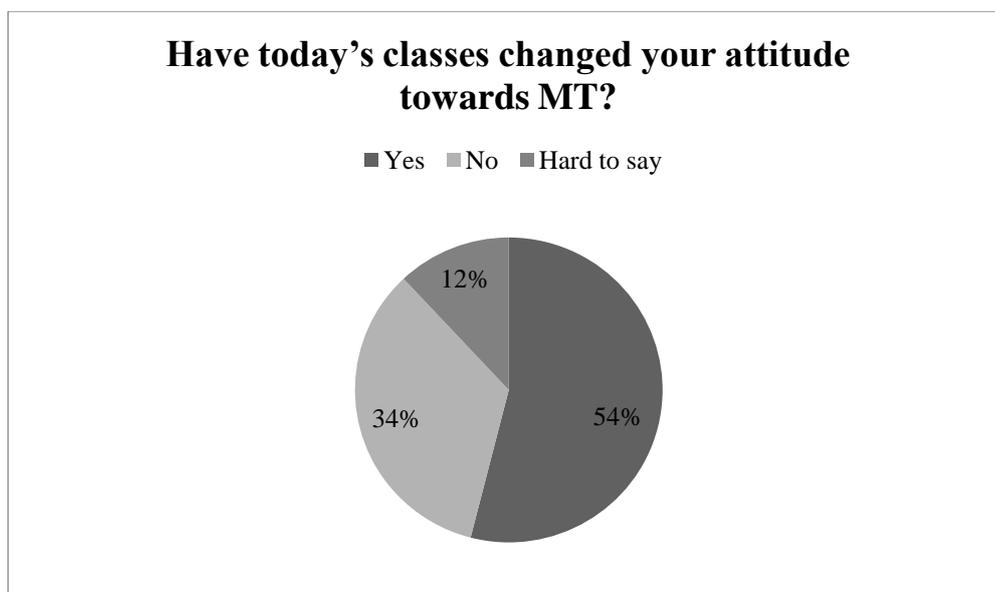


**Figure 6** Participants' answers to the survey question: *Did you find the form of the classes interesting?*

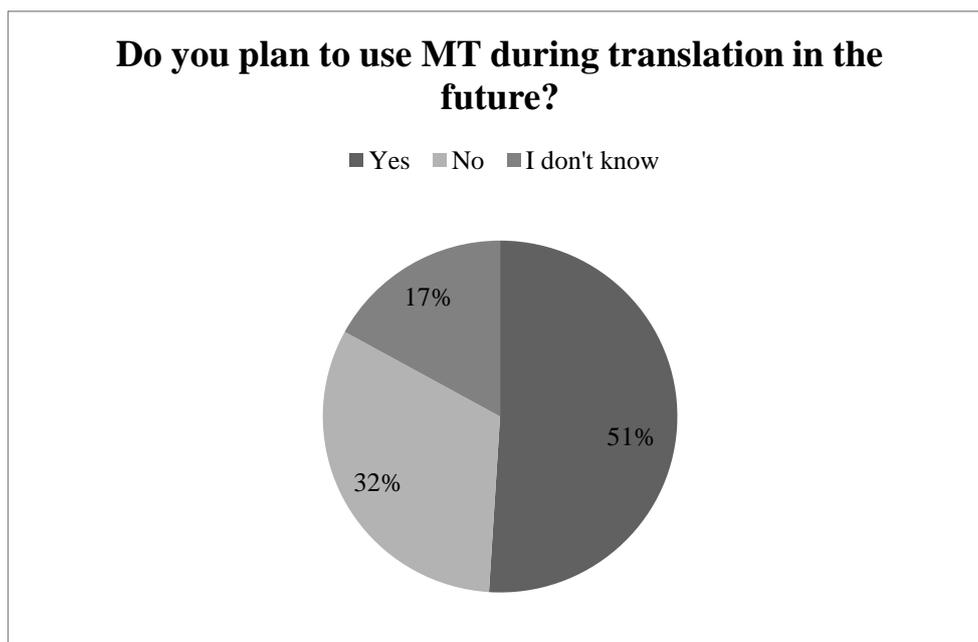
<sup>8</sup> The information about the errors to be expected in MT output can be found in Hutchins, 2005; Sycz-Opoń, 2014; Guillou, 2013.



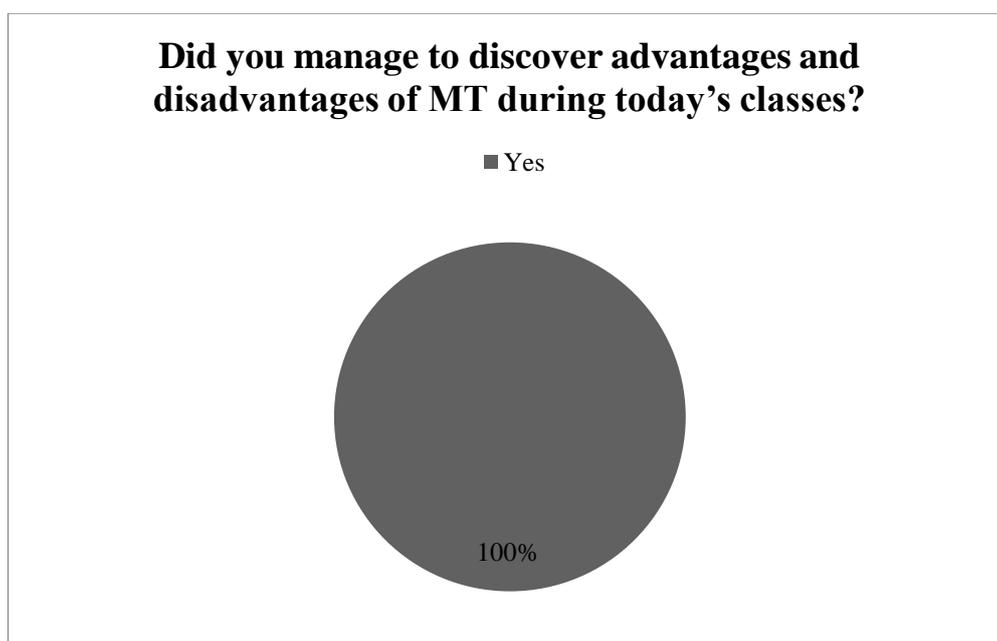
**Figure 7** Participants' answers to the survey question: *Will knowledge about MT prove useful in your future career?*



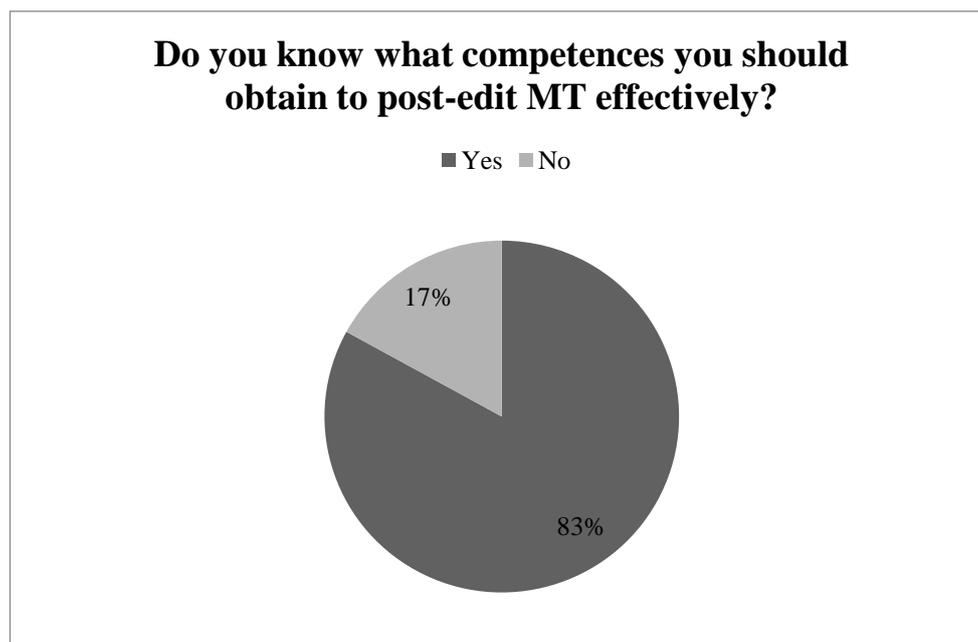
**Figure 8** Participants' answers to the survey question: *Have today's classes changed your attitude towards MT?*



**Figure 9** Participants' answers to the survey question: *Do you plan to use MT during translation in the future?*



**Figure 10** Participants' answers to the survey question: *Did you manage to discover advantages and disadvantages of MT during today's classes?*



**Figure 11** Participants' answers to the survey question: *Do you know what competences you should obtain to post-edit MT effectively?*

This question was followed by the open question: *Please enumerate the competences required for MT post-edition.* Among the competences provided by the students in the survey were: *target and native language proficiency, attentiveness, conscientiousness, critical thinking, concentration, perceptiveness, patience, and openness to various possible ways of translating a text.*

## **5. Conclusions and recommendations for future educational projects involving MT**

In general, as the results of the survey revealed, the classes were perceived by the students as both attractive (95%) and useful (90%). Interestingly, 90% of the students found the classes useful for their future career, even though only half of them (51%) declared willingness to exploit the potential of MT in future translation projects. This presumably means that even though some of the students, after testing machine translation, came to the conclusion that MT was not a valuable tool for a translator, they still valued the opportunity to conduct such a test during classes.

As much as 54 % of students declared change of attitude towards MT. This is also a result pointing to the effectiveness of the classes. Indeed, 34% stated that their opinion remained the same (hopefully, after classes it was based on reflection and experience, not just mere intuition). Yet more than a half actually discovered that their previous views on MT had not been entirely right. Thus, it could be inferred that the classes served well their educational purpose: that day the students learned, or rather discovered, something new.

The aim of the classes, i.e. to raise students' knowledge of various aspects of MT post-edition, was also accomplished. All of the students participating in the classes stated that they understood the pros and cons of MT post-edition. Also, 83% of the students declared that they knew the skills necessary for MT post-edition, which they enumerated correctly in the following survey question.

It could be assumed that the greatest advantage of these classes was the MT Evaluation Protocol. This tool, though criticised by the students, who had to make

an effort to fill it in, raised the educational value of the MT post-editing task. During the experimental classes we could observe that the Protocol kept students focused on critical analysis and evaluation of MT output. Since they were required to fill in the Protocol, they had the motivation to conduct an active analysis of various aspects of machine translation. The first part of the Protocol, where they had to enumerate all the errors found in the MT output, kept them focused on each post-edited sentence. This prevented the problem that had occurred in our previous study devoted to MT, where the students had failed to notice a great number of errors contained in MT output, because they had analyzed the text superficially and hastily (Sycz-Opoń & Gałuskina, in press). Thus, the Protocol taught the students how to analyze the MT output conscientiously, paying attention to detail, which is crucial for error-proof post-edition.

The second part of the Protocol directed students' attention to other aspects of work with MT, which they might forget to consider otherwise, e.g., the skills of a post-editor, factors determining MT quality and differences between MT post-edition and traditional translation (see: Appendix 1). This was good preparation for the discussion that took place at the end of the classes. Since the students had time to think about and form opinions at the stage of MT testing, they actually had a lot to say during the classroom discussion, and the discussion was fruitful.

Though the Protocol proved to be an effective educational tool, we discovered several deficiencies in its design that should be improved. First, the wording of the Protocol turned out to be too difficult for the students (which is quite surprising taking into account that philology students were participating in the classes). Thus, it seems that the categories provided in the Protocol need to be presented in the simplest possible way, and additionally explained before the commencement of MT testing. It is also worth considering preparation of the Protocol in students' native language. In our study we provided the participating students with the same universal MT Evaluation Protocol, which means that some of the grammatical categories included in the Protocol did not apply to all languages (e.g., "incorrect elision or no elision" category applied only to French). The students were perplexed about these categories of errors, even though they had been explained by the teacher prior to the task.

The design of the protocol is a key factor determining the success of the classes. The task of MT evaluation should be to some extent entertaining for the students. Therefore, it is important to provide them with the evaluation tool that is user-friendly and unambiguous. Also, for the same reason the length of the texts should be carefully considered. For educational purposes, the students should have the chance to post-edit various types of texts, which means that the post-edition task, for practical reasons, cannot be very short. On the other hand, if the amount of text is too large, after some time MT testing is no longer a joyous activity, but a mundane chore. While deciding on the length of texts one should take into consideration the expected number of errors (it can be easily verified by generating MT raw output). In our study, the FR-PL/PL-FR and ES-PL/PL-ES language pairs contained more errors and required higher post-edition effort than the EN-PL/PL-EN language pair.

Post-editing the MT raw output may soon be the future of a translation trade, especially in the field of specialist or technical translation. Therefore, preparing students for that task may be of great benefit for them. In a controlled educational environment they can learn how to cooperate with MT in the most effective and effortless way. The scenario of the classes presented in this article, despite some deficiencies, proved to be a valuable educational tool. Hopefully, it will serve other teachers in their pursuit to present MT to translation students.

**Appendix 1** The MT Evaluation Protocol (translated into English)

Type of errors	Error specification	Text 1
<i>Grammatical errors</i>	a misspelled word	
	an incorrect accent	
	incorrect elision or no elision	
	incorrect word formation	
	wrong tense	
	the use of a wrong category of a word	
	an incorrect pronoun	
	incorrect word capitalisation	
	an incorrect article or no article	
	missing negative particle	
<i>Syntactic errors</i>	incorrect agreement	
	wrong sentence order	
	an incorrect conjunction	
<i>Lexico-semantic errors</i>	wrong punctuation	
	mistranslation of a lexical item	
	no translation	
	lack of translator's remark where necessary	

1. Rank the texts post-edited by you according to the quality of their machine translation (from the one that required the least number of corrections to the one that required the greatest number of corrections)

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

2. What factors determine MT quality? You can tick more than one answer.

- Popularity of a given genre
- Source language
- Target language
- Length and syntactical complexity of sentences
- Terminology
- Grammatical constructions in the text
- Quality of the text
- Other: ....

3. In what way MT post-edition differs from traditional translation? ....

4. What skills should good post-editor possess? .....

5. Can you see the differences between post-edition of a text from the native language into the foreign language and a text from the foreign language into the native language? .....

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