Computer competence in the translation classroom

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Abstract
When asked what all types of translation have in common, one can answer that they all are computer-based. It means that today translators use computers in all areas of translation, regardless of whether it is literature or construction. Whether we want it or not, any modern translation class requires a practical computer component to be introduced to the curriculum in order to provide students with a solid base for the future work and study.

The paper attempts to define translation and discuss the concept of computer competence, and relate them in the context of translation teaching. Furthermore, several key ways to develop computer competence will be discussed. These will include word-processors and the importance of advanced formatting techniques, utilising optical character recognition software and graphical solutions for regular and computer-aided translation, using and exploiting computer-aided translation (CAT) systems commercially, creating translation memories and their commercial importance, as well as document alignment for future use.

Finally, the role of the trainer in the modern classroom will be discussed.

Keywords
translation competence, computer competence, translation teaching, computer-aided translation, translation trainer, translation memory, trainer, formatting, optical character recognition, sub-competence

1. Introduction
A contemporary discussion on translation teaching, and translation itself, cannot take place without acknowledging the importance of computer use. Computers, present in virtually every aspect of our lives, have become an integral part of the translator’s workshop, even if they are used just as sophisticated typewriters.

However, their application can be much broader than that. Computer systems give the translator an opportunity to use a number of tools that facilitate and hasten the process of translation, while improving its quality at the same time. In support of this claim Pym (2003: 493-494) says that “technology will always be one or two steps ahead of any multicomponential list. […] Electronic tools are simply techniques that speed up and broaden the production of alternative target texts.” The translation market is in constant shift and the only way to stay up to date with current demands of
the translation trade is to acknowledge the importance of computer tools and adjust accordingly.

2. Translation as understood by future translators
The key notion in the discussion on translation teaching is, and should be, the notion of translation itself. The issue has been deliberated upon by many academics and it is easy to quote one of their definitions of the term. The Oxford Companion to the English Language (1992: 1051-1054) offers the following definition:

Translation is the communication of the meaning of a source-language text by means of an equivalent target-language text.

Despite the fact that the definition is general, it is still quite adequate. Yet, one might wonder if those who come to study translation understand it in the same way. To answer this question a short research survey was conducted amongst 54 students of the 2nd-year bachelor programme at the University of Łódź. Amongst other questions, students were asked to provide their own definition/understanding of the notion. The questions demanded open, descriptive answers. Virtually every of the surveyed students indicated that for them translation denotes rendering of a text written in one language into another language, retaining meaning all the while. It is especially interesting because these people did not receive any theoretical or practical training in translation before. It should be mentioned, however, why they chose translation track, as it is directly related to their general understanding of the term. Almost half of the survey participants declared that they wanted to become translators in the future. However, the remainder claimed that they wanted to study translation either because the only alternative they had is language teaching track (and this is not something they would like to do professionally) or because they will improve their English this way. These attitudes may and most probably will, change during their training period. Nonetheless, they show that translation is understood by students not only as a transfer of meaning from one language to another but also as: a) prospect for successful professional career; b) a way to improve English in ways not offered by practical English use classes; and c) the only reasonable vocational track for people wanting to study English at the university.

3. Translator’s computer competence (TCC)
The discussion on the issue of the TCC demands a few lines to be devoted to translation competence.

Schäffner and Adab (2000: viii) agree that the 20th century brought “a consensus amongst experts in Translation Studies that translation is a complex activity, involving expertise in a number of areas and skills”. Not only do they need to have language and technical skills to perform the task at hand, but also they need to possess knowledge, often very specialised, which allow them to produce reliable translations. Hence,
translators draw both from linguistic competence in case of their native language and from general (or translation) competence in case the second or third language that they translate to/from.

Anthony Pym (2003) proposes the notion of “supercompetence” to denote the ‘general translation competence’. He acknowledges that translators require to “know a fair amount of grammar, rhetoric, terminology, computer skills, Internet savvy, world knowledge, teamwork cooperation, strategies for getting paid correctly” (Pym 2003: 489) and more. These skills (or rather sets of competencies) often decide on the successfulness of a translation project, even though individually they may not be strictly concerned with translation themselves.

Therefore, it could be argued that translation competence is a notion that covers all kinds of skills required (to lesser or greater extent) to produce correct and successful translations, total sum of translator’s knowledge required to render a text in a target language. PACTE group (2003) proposes the following six sub-competencies, which could be regarded as constituents of Pym’s ‘supercompetence’:

- Language sub-competence in two languages
- Extra linguistic sub-competence
- Instrumental/professional sub-competence
- Psycho-physiological sub-competence
- Transfer sub-competence
- Strategic sub-competence

The group claims that the abovementioned sub-competencies are inextricably linked one to another, shifting to prominence basing on each individual translation.

Variations in translation competence may occur in relation to directionality (direct or inverse translation); language combinations; specialisation (technical, legal, literary, etc.); the translator’s experience or the translation context (translation brief, time available, etc.) Thus, for example, in inverse translation the instrumental/professional sub-competence gains importance; the strategies used by the translator vary according to the distance between the language pairs used in the translation; in each translation specialty greater importance will be given to different psychological abilities (logical reasoning in technical translation, creativity in literary translation); a greater degree of automation may be expected when the translator is very experienced; the translation context (translation brief, time, etc.) may require a certain sub-competence to be activated (instrumental/professional, psycho-physiological, etc.).

PACTE 2003

Therefore, the overall success of translation depends heavily on a translator having and employing all of the abovementioned competencies. This implies that, referring to the notion that the translation marked is in constant change, the competencies shift constantly as well, adjusting to the needs of individual translation jobs and the market condition as a whole.
In this light the TCC (or ‘instrumental/professional’ competence, if the PACTE nomenclature is to be used) is but one of many sub-competencies that any successful translator should have. It is but a fraction (albeit an important one) of all the knowledge required to produce commercially viable translations.

Therefore, when discussing TCC one has to be aware that the discussion concerns only a specialised (though quite extensive) area of expertise, which deals primarily with proficiency in utilising computers and computer software for the purposes of translating. The goal of these skills is to support translators in their work, not to translate for them.

4. Computer competence skills

The discussion on particular subsets of the TCC requires addressing the issue of the relevance of this kind of competence for a translation course.

In *Redefining Translation Competence in an Electronic Age*, Pym mentions the problem voiced by his students in relation to his Advanced Translation class.

[W]e [students] are not really translating […]. But I quickly reply, we have learned how to use Revision tools and comments in Word; we have discovered a few good tricks for Internet searches; we have found out about HTML; we can create and localize fairly sophisticated websites; we can do wonderful things with translation memories… and these are the things that the labour market is actively looking for. All that, I insist, is part and parcel of translating these days. […]

Pym (2003: 481-482)

The quote shows that students come to a university thinking they will learn how to translate and then they are faced with a huge amount of technical information on the process and tools used for translation. This problem is quite common in practical translation classes. To what extent the course should be modelled on the current demands of the market, as subjectively seen by the tutor, and should it take students’ expectations into consideration? Such a question is especially relevant in the context of the survey results, mentioned in section two of this paper. If there are people who came to the course just because nothing else appealed to them, should the course be modified for their benefit by including universal skills which will come handy even if they do not become translators?

The answer is yes, and no. Yes, because translation classes, regardless of the type of skills they try to teach, are to be primarily focused on translation itself and any class devoid of the translation component should not be treated as a proper translation class. On the other hand, the role of a translator trainer is to prepare their students to start a professional career after graduation, which means entering a highly competitive market that demands certain extra-translational skills. What is more, computer skills in
particular prove to be a substantial asset when looking for a job. "Computer literacy [or skills] is knowing and understanding not only what computers can do but also what they cannot do" (Worksearch Information Center). Therefore, a translation course with significant volume of computer-related theory and practice will benefit both future translators and people who will choose a different career, like working in an office, for example. It is then worth considering altering some of the in-class activities so that they demonstrate how to use certain software and computer skills outside the translation context. Such an attitude would benefit both future translators and those who happen to be studying translation for other reasons.

Having said that, let us go back to the issue of the TCC. Computer skills, even though not vital to the process of translation, are very important for any translator since they have a huge influence on the quality, speed and flexibility (e.g. ability to work in groups or to work with online translation packages) of translation. Such traits are desired by translation outsources and constitute undisputable asset for any translation graduate.

Bogucki (2009: 52) names three key categories that rely on computer application in translation: word-processors, electronic dictionaries and glossaries and translation memory-based software. While this list is still current, its elements should be further extended to encompass a broader range of skills/applications that are in everyday use.

The list below presents computer skills found most desirable in apprentices who wanted to undergo an apprenticeship in the translation Agency in Łódź.

The list is arranged from most to least desirable skills:

- text-formatting and handling optical character recognition (OCR) systems
- CAT systems (use of, translation memories, termbanks, server projects, CAT revision tools)
- online sources (terminology, machine translation, online file converters, etc.)

The list presented above denotes certain areas of expertise since the expansion of the Internet and amount of different software available on the market would make it impossible to name and discuss each and every skill (a skill in this context is understood as the ability to handle a certain computer programme or use a given Internet tool/source). Nevertheless, some examples should be given to provide insights on what these categories include and how they correspond to the notion of translator's computer competence.

4.1. Word-processors and importance of advanced formatting techniques

Available at: http://www.aarpworksearch.org/Inside/Pages/HowEmployableAmI.aspx
2 Based on personal experience of working as a project manager (PM) in a translation agency in Łódź in years 2008-2015 and feedback from other PMs.
3 Personal experience as a project manager in Translateria Translation Agency, 2008-2015
Text editing, or more particularly text formatting, denotes a set of skills that are primarily concerned with the visual aspect of translation. A translator is no longer a person who only translates a given text. The definition of the profession shifted from a pure linguist to someone deeply involved in cultural and technical communities. Pym (2003: 491) suggests that today the “language-service provider is currently the most apt” name for the profession. What does it mean? In the case of text formatting and using word-processors it means that translators are frequently required, depending on their assignment, not only to translate but also to edit and improve on the original visual aspect of the text so that it looks neat and tidy (professional) and can be used by its owner (the customer) with no further work involved. Today the profession requires more flexibility, especially that customers tend to appreciate all-in-one package services (translation, proofreading, editing). Such a target text can then be used “as is”, i.e. as an end product.

Therefore, despite the fact that computer-assisted translation tools and machine translation solutions do receive more and more recognition, word-processors still constitute an undeniable foundation of the translator’s workshop.

4.2. Utilising optical character recognition software for regular and computer-aided translation

Another set of computer skills that can be categorised as part of the TCC are skills related to processing of non-editable data, like images, for example. Although regular written translation concerns primarily editable content, a significant portion of the total volume of translation involves files that have to be either translated “on-the-fly” (i.e. source text is used for reference only and is not involved physically in the process of translation) or the translator may decide to pre-process them so that they can be used in specialised software, like computer-assisted translation (CAT) tools. The latter approach has many advantages since it allows to benefit from the effort in the future. If a non-editable document is translated “on-the-fly”, all gained experience, terminology and knowledge related to a given topic will be stored only in the translator’s memory. When a document is converted to an editable format and translated with the application of specialised software, like CAT tools, all that knowledge [translation memory] is safely stored on a computer and is ready for future reference/use.

4.2.1. Optical character recognition (OCR). OCR systems are frequently savours in the case of large documents (manuals, contracts, etc.) which are delivered for translation in the form of a scan (e.g. PDF, JPEG or TIFF image). For someone who works with CAT tools, converting such text to an editable format may be of crucial importance as it may turn out that their content has already been partially translated before (and stored in a translation memory [TM]) and the translator can use that translation to speed up the translation process. Competences involved in this case are twofold. First, the translator needs to have linguistic competence in order to analyse the document and decide whether they will benefit from its pre-processing and using
owned translation memory. Second, they need to know how to handle the conversion process itself. The conversion process will not be analysed here, though. Suffice to say that it may include cleaning, straightening, brightening, graphical editing of the original, followed by proper application of the OCR Software (Abbyy Finereader, OmniPage, Readiris, and more) and final post-processing (addressing conversion issues, further cleaning, spellcheck, fixing layout, and more). Knowing which documents are suitable for conversion, what problems the converter may find and how to address them (before, during, and after the process) are very handy assets indeed.

4.3. Computer-assisted translation (CAT) systems

CAT tools facilitate the process of translation by referring to a database of translations, called translation memory, in search for a ready translation (full or partial) of a given text fragment. When such match has been found, the software suggests its use to the translator. Such feature often does have huge importance for individuals who translate large volumes of similar texts or work with voluminous documents that contain large amounts of repetitions. In such cases, the use of a CAT tool will not only speed up the process but, thanks to its time-saving qualities, it is very cost-efficient.

CAT tools have ceased to be mere ‘curiosities’, used by single translators, long ago. Now they have become powerful bundles of resources contained in one system. In many cases their use is no longer an option – it has become mandatory due to the need for exchange of resources and team workflow. Many customers (including corporations and translation agencies) require translators to utilise CAT systems in order to work with online translation packages, translation memories (discussed in the following section) provided by the customer, or they want to receive translation memory created during the process of translation for future use. To go one step further, it is often the case that customers require translators not only to use CAT tools but to use particular ones4. This is due to partial incompatibility of the CAT and TM systems. As a result, customers often search for language professionals who work in the same CAT tools as them in order to avoid any compatibility issues.

4.3.1. Translation memory

A translation memory (TM) is a database containing paired source and target texts, which are then used as a reference for future translation. Client software (CAT tool) processes translated text and checks TM for previous translation. If a reference is found, the software suggests re-use of the previously translated segment and it is up to translator to decide whether to use it, modify it or skip it altogether in a given context.

An additional benefit of the translation memory (and another computer skill at the same time) is the option to create a TM out of documents translated without the use of a CAT tool. The process, called document aligning, combines source and target

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4 Personal communication with several Łódź-based translators, working for translation agencies from Łódź and Warsaw.
files (source text and translation), divides them into smaller chunks called segments, and pairs them between two texts. The translator then checks the alignment for errors, confirms correct matches and exports aligned segments to translation memory. This way, even professionals working in the field for a number of years can upgrade their translator’s workshop and re-enter the CAT-dominated market, at the same time increasing the speed and volume of their translations.

4.4. Online resources
Widespread globalisation and easy access to information virtually from anywhere force modern translators to rely heavily on the Internet. More and more items have to be checked for previous translation, translators have to work in online teams, use online tools (e.g. machine translation, corpora, dictionaries, message boards or social networks) and search various data every day. Additionally, more and more file processing tools are available online (PDF, TIFF splitters/mergers, online OCR systems). Cloud and file sharing services should also be mentioned in this section since they are becoming a standard for file delivery nowadays.

The importance of the Internet in translation is not to be underestimated. It allows translators to find precise, valuable information virtually in no time, to process project files and deliver them to the customer quickly and effectively.

4.5. Summary
While some of the skills mentioned above will be useful exclusively for translators (CAT, TM-skills), the editing/formatting, OCR and online skills will be beneficial for everybody attending the course. They can be all referred to as sub-skills of, to coin a phrase, an ‘advanced digital document handling’ skill – a trait welcome by most employers. What is more, this collective skill comes handy not only in the workplace but also in everyday life. Therefore, introducing this set to the course curriculum will benefit all course participants, regardless of if they will become active translators in the future or not.

5. The role of the trainer in modern translation classroom
The discussion on the skills, or competencies, which could improve the quality of a translation course would be partial without mentioning the role of the trainer. It can be said that not every translation teacher can be a translator and not every translator can be a translation teacher. Therefore, a new term should be applied to the profession, i.e. a translation trainer, which combines the two. Kelly (2008: 100) states that “our [academic] particular field also tends to require those who teach translation to be actively involved in professional translation practice of some kind.” It is only natural to say so since translation is highly practical subject, demanding down-to-earth experience and attitude on behalf of the trainer. At the same time, Kelly raises a point that having translation experience does not necessarily mean knowing how to teach (Kelly 2008: 102). Bearing in mind the above and all the computer skills, required by
the translator profession nowadays, it could be said that the modern translation classroom requires some kind of supertrainer, who would combine the skills of an academic teacher, a professional translator and an IT specialist. The role of such a trainer in the context of translation should primarily include following current market trends and adjusting the course accordingly so that students finish it having obtained the most current knowledge possible. While both the course and the trainer’s competence (see Kelly 2008) require adherence to general translation track guidelines, they cannot be restricted by them. Constant development of the translation market (demand, technology, areas of expertise, etc.) forces changes in the curriculum and the role of the trainer, whose job is to be both “language-service provider” and to teacher.

6. Conclusions
In conclusion, the practical approach to teaching computer translation skills presented in this paper is to turn the reader’s attention to the necessity to introduce highly specialised, IT-related skills into the translation curriculum in order to train “language-service providers”, to use Pym’s term, who will be able to enter a highly competitive translation market upon graduation. Such training requires the teacher to step out beyond the classical translation teaching framework and follow current market trends, adjusting their course accordingly. What is more, adding a significant [information] technology component to the curriculum will benefit also those students who chose translation track but their ultimate goal is not professional translation. The role of the trainer is to train the students and provide them with state-of-the-art skills that they will be able to employ in their future work, regardless of what that might be.

References
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