

ПЕДАГОГІКА

UDC 811.111:387.6:004

DOI <https://doi.org/10.24919/2308-4863/56-1-22>

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IT IN TRANSLATION PEDAGOGY IN EUROPE AND UKRAINE: REFLECTIONS AND EXPERIENCE

The article researches into the issues of information technologies involvement in the process of translator and interpreter training. Three fields of information/digital technologies application for this process have been determined, each of them has been studied. Three techniques of translation involving IT have been separated; of these three, application of computer technologies for language study has achieved the widest development in this country. The technologies used for organization of translator's/interpreter's work, which have been analyzed, are commonly dealt with during the general courses on information technologies according to the domestic practice. Three techniques applicable in the translation process by modern translators have been singled out; each of them has been characterized, special emphasis put on CAT tools and machine translation. The genre of the text for translation has been stated as the grounds for the choice of the translation technique. The study of the software used in the process of translation including CAT tools and MT has been proved to be the most problematic part in T&I training, especially in Ukraine. European sources demonstrate that many EU countries encountered similar hardships in the past. Approaches to the solution of IT involvement in translation pedagogy characteristic of European, post-Soviet countries and Ukraine have been researched into and compared; good practice in this sphere has been analyzed. Special attention has been paid to the foundation of European Master's in Translation (EMT) Network in 2009 by the European Commission's Directorate General for Translation (DGT), the aim being the improvement of the quality of translator training in EU countries. Other deficiencies in the domestic system for training translators and interpreters have been highlighted, the grounds for their existence and the avenues for correction have been defined. Relevant conclusions have been drawn on the basis of domestic and foreign experience in the area. The need for development of modern T&I training standards, which would include the relevant IT competence and the European experience in the foundation of specialized journals were underlined.

Key words: *translation pedagogy, T&I training, information/computer/digital technologies, IT, CAT tools, TM tools, MT, applicants for higher education.*

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ІНФОРМАЦІЙНІ ТЕХНОЛОГІЇ У ПЕДАГОГІЦІ ПЕРЕКЛАДУ В ЄВРОПІ ТА УКРАЇНІ: РОЗДУМИ ТА ДОСВІД

У статті досліджуються питання залучення інформаційних технологій до процесу підготовки перекладачів. Визначено три сфери застосування інформаційно-цифрових технологій у цьому процесі, кожен з яких було досліджено. Було виділено три шляхи застосування комп'ютерних/інформаційних технологій в процесі підготовки перекладачів; з цих трьох найбільшого розвитку в Україні отримало застосування комп'ютерних технологій для вивчення іноземної мови, про що, зокрема, свідчить глибоке дослідження цієї теми в науковій літературі. Було проаналізовано технології, які використовуються для організації роботи перекладача. У вітчизняній практиці вони, зазвичай, розглядаються в рамках загального курсу з інформаційних технологій, зокрема у Національному університеті «Одеська юридична академія» та у Міжнародному Гуманітарному університеті. Виокремлено три методи, що застосовуються в процесі перекладу сучасними перекладачами; кожен з них був охарактеризований, особливий акцент зроблено на інструментах САТ та машинному перекладі. Основою вибору техніки перекладу названо жанр тексту для перекладу. Доведено, що вивчення програмного забезпечення, яке використовується в процесі перекладу, включаючи інструменти САТ та машинний переклад, є найбільш проблемною частиною підготовки усних та письмових перекладачів, як в Україні так і в інших пост-радянських країнах. Європейські джерела показують, що багато країн ЄС стикалися з подібними труднощами в минулому. Досліджено та порівняно підходи до вирішення проблем залучення інформаційних технологій до навчання усних та письмових перекладачів що застосовуються в країнах Європейського союзу, пострадянських країнах та Україні; було проаналізовано передову практику в цій сфері. Було особливо відзначено створення в 2009 році Генеральним директором Європейської комісії з перекладу (DGT) Європейської Мережі з Підготовки Магістрів з перекладу (EMT), метою якої було зазначено покращення якості підготовки перекладачів у країнах ЄС. Було висвітлено інші недоліки вітчизняної системи підготовки перекладачів, визначено підстави їх існування та шляхи виправлення. На основі вітчизняного та зарубіжного досвіду роботи зроблено відповідні висновки. Підкреслено необхідність розробки сучасних стандартів навчання усних та письмових перекладачів, які б включали відповідну компетенцію в сфері інформаційних технологій. Було зазначено позитивний європейський досвід у створенні спеціалізованих журналів присвячених саме комп'ютерним технологіям у перекладі.

Ключові слова: педагогіка перекладу, підготовка перекладачів, інформаційні/комп'ютерні/цифрові технології, IT, САТ, МП, здобувачі вищої освіти.

The recent thirty years have witnessed the drastic changes that have been brought to various spheres of human activity by the wide application of information technologies (hereinafter – IT); this undoubtedly concerns translation. Very few changes had occurred in this area since the days of ancient Egypt or Mesopotamian kingdom until the late 20th – early 21st centuries. Indeed, although the writing tools had changed, bilingual dictionaries developed the critical

work of transformation of a text in a source language into its analogue in the language of translation had occurred solely in the brain of the translator. An additional actor – artificial intelligence – has joined the process, its weight and place is still being evaluated, although its indispensable character for the work of a modern translator has become a new reality. Thus, “translation practice has become increasingly technology driven and technology dependent.”

(Andrew Rothwell, Tomáš Svoboda, 2019: 26 – 54).

Taking the above said into consideration, the further changes in the system of translator and interpreter training (hereinafter – T&I training) – both the European and domestic ones – appear natural and expedient. The need of introduction of IT, aka digital or computer technologies, into T&I training has become commonplace in all publications, professional community's and official recommendations dealing with translation pedagogy, e.g.

“... nuanced understanding of how technology and translation are intertwined should be a vital ingredient of any broad education in translation studies, acquisition of technical skills remains closely allied to translator ‘training’ agendas.” (Dorothy Kenny, 2020: 498 – 515).

In actuality, the increasing involvement of computer technology in the practical educational work of Ukrainian universities engaged in teaching translation and interpretation should be regarded as one of the challenges facing the whole system of national education in this sphere. (Alexeyev N. E. Alexeyeva L. I. Syniova T. V., 2021: 8 – 14). This issues, however, have appeared to have a number of distinct and mixed aspects; the practice, in its turn, has produced various approaches to the solution of the problem frequently influenced by peculiarities of the national education systems, history and experience, global trends, the situation on the market of translation, etc.

The above mentioned facts and the rapidly developing character of the modern translation process resulting in subsequent evolution of T&I training attach special **topicality** to this study.

This article, therefore, **aims** at the study of modern approaches to the application of IT for T&I training as well as good practice in this sphere of European and Ukrainian educational institutions.

The **subject** of this paper is the modern state of involvement of information technologies in the process of training translators and interpreters in Ukraine with regard to the findings of European translation pedagogy.

The **task** of this paper is to develop and suggest relevant methods for further implementation of IT into domestic T&I training system.

According to the definition adopted by UNESCO, information (and communication) technologies are forms of technology that are used to transmit, store, create, share or exchange information [UNESCO 2006]. In the context of this article, IT are understood and used more narrowly as computer/digital technologies. which include machine translation and computer-aided translation, being itself an umbrella

term for a variety of tools and processes used by contemporary translators.

The application of these technologies in the translators' and interpreters' training process has attracted close attention of researchers and educators both in Europe and Ukraine and is generally viewed in a number of aspects, namely

- The use of IT for the language study being a part of T&I training;
- The use of the above said technologies for organization of a translator's activity;
- The use of specific software in the process of translation and teaching thereof to would-be translators and interpreters.

The first idea is widely supported and actively promoted by educators at all stages of language study from primary education to higher and postgraduate ones. The advantages most generally listed include:

- computer can promote language interaction between teacher and learners;
- it offers the possibility to simulate some processes and phenomena in motion through animation, and thus some experimental demos;
- methods and manners of organizing efficiently and modern the educational / learning process;
- getting used to computer technology from an early age influences students intellectual development;
- it offers the possibility of realising a string of didactic operations which are very important for evaluation, and also for developing students creativity. (Aurora – Tatiana Dina, Silvia-Ileana Ciornei, 2013: 248 – 252).

The additional advantage, which should be specially noted with regard to T&I training is the improved possibility to teach understanding of the oral speech – the skill that is indispensable for an interpreter. The audio course using computer technologies is available in practically all modern teaching aids; some involve actors speaking English with accents other than the standard English, which should be regarded of special relevance for interpreters.

The Internet provides still more options for mastering a foreign language, which go far beyond the boundaries of this article.

However, computer-assisted learning has certain drawbacks.

- deterioration of the teacher role in the learning process;
- division in small sections and well delimited of content leads shortening the matter, favouring those students with analytic thinking, but not those with synthetic thinking;
- controlling step by step students mental activity by the teacher stops them from developing creative abilities and entrepreneur spirit and initiative;

• excessive individualization of learning can lead to denial of the teacher – student dialogue and leads to the isolation of the learning process from its psycho – social context. (Aurora – Tatiana Dina, Silvia-Ileana Ciornei, 2013: 248 – 252).

It may be further mentioned that the best available in Ukraine teaching aids using IT technologies are of foreign, mostly British origin and have a basic deficiency – their target audience is anyone who is not a native speaker and, therefore, specific problems that face the speakers of particular tongues are not and, probably, cannot be fully addressed.

Nevertheless, positive results and still better prospects seriously outweigh critical remarks; moreover, existing drawbacks can be and are constantly corrected. Further, various methods involving IT for language study have gathered additional momentum due to the COVID pandemic restrictions. Although language proficiency is undoubtedly indispensable for a would-be translator his or her competence is not limited thereto.

Many universities both in Ukraine and abroad that are engaged in training translators and interpreters tend to pay additional attention to teaching practical issues related to the organization of translators' work, which have emerged in the process of research into the modern translation market and employers' demands to their would-be employees' skills and knowledge. The experience of functioning of educational "translation bureaus" (e.g. the International Network of Simulated Translation Bureaus) has shown that a person engaged in professional translation activity normally has to pass through all or most of the following stages:

1. Receiving the original document from the customer;
2. Preparing source text for translation;
3. Translation;
4. Editing; consulting the customer where necessary;
5. Layout;
6. Quality control and updating the database of completed translations and terminology;
7. Sending the translated document to the customer, receiving comments;
8. Archiving the translation and glossary;
9. Receiving payment.

Presently, all these stages are most successfully completed with the use of computer/digital technologies, which has prompted introduction of the courses on electronic document management into the educational process and syllabi that generally include:

- work with application packages;
- obtaining operational information;
- communication with remote partners;
- making competent decisions;
- data entry and systematization.

It should be noted that in our practice (NU "OAL" and IHU) the above mentioned issues are dealt with within the framework of a wider course on information/computer technologies, which is obligatory for all applicants for higher education. This appears especially relevant with account of the viewpoint expressed by many researchers, e.g.

"... current thinking in higher education is very concerned with 'generic competences', namely 'those which will facilitate incorporation into the world outside university, into the world of work and society at large as critical citizens, together with preparation for lifelong learning', then technological competence need not stand apart from such generic competences, as there is a strong argument that a good technological education can make a significant contribution to the development of critical citizenship ..." (Dorothy Kenny, 2020: 498 – 515).

Foreign researchers (Andrew Rothwell, Tomáš Svoboda, 2019: 26 – 54) mention more specified courses directly connected to the tasks performed by would-be translators. Taking into account the fact that T&I competence in many European countries is frequently acquired through courses taught outside universities, this approach seems expedient in their situation. In this country, however, with T&I training held at higher educational institutions, the general course of IT competence appears sufficient for this purpose in most cases.

However, the most notable changes related to the application of digital technologies have occurred in the process of translation itself and can be reduced to three basic techniques, namely

1. Translation by a translator with application of electronic dictionaries, data base, and various types of reference materials; this also includes communication with the professional community via the Internet.
2. Application of CAT (Computer Aided Translation) tools.
3. Machine translation (hereinafter – MT).

The choice of the technique to be applied obviously depends on the genre and linguistic complexity of the text submitted for translation and, therefore, these texts require previous analysis by the translator. The prospects of MT with regard to ideal or, at least, adequate translation of all texts is the subject matter of speculation and debate among the specialists in IT and the translators' professional community; however, the prevailing opinion is that at the present stage of the IT development, the texts containing idiomatic language and emotional load expressed in complex linguistic constructions simultaneously employing more than one meaning of words and expressions cannot be translated correctly:

“... at the moment, ... no computer program, no matter how perfect it is, can provide for the whole variety of translation options, and ... convey the full associative range of the text, which a professional translator intuitively feels.” (A. S. Olkhovska, 2016: 34 – 36).

This is especially true of fiction where the task of the translator is not limited to the translation of the factual information; rather, in most cases, it is required to convey the emotional atmosphere of a literary work and, therefore, the translator, in a certain way, becomes a co-creator of the given piece of literature, which, ideally envisages a certain literary talent – a category that does not readily yield to digital analysis. The translation of sociopolitical texts, i.e. speeches and addresses of political leaders, articles on social and political issues, etc. may not require special literary talents but the abundance of idioms, words in indirect meanings, references to historical and cultural events, religious and political doctrines and even literary works and especially humor may complicate the translation not only for a computer but also for an unexperienced human translator. This is, however, where the referential potential of the Internet is indispensable.

Hence, the most complicated type of translation is and, most probably, will be performed in the human brain, at least in the foreseeable future; in this case, IT serve as a very valuable and convenient source of information and substitute for paper/printed materials; and the training in this sphere should envisage traditional training in a foreign as well as the native languages – the latter is quite frequently unjustly omitted or reduced – and in the theory and practice of translation. Further, such translations require a high level of general knowledge and deep emersion into the relevant political and cultural reality.

CAT and MT are frequently viewed together since the area of their application comprise what Lawrence Venuti labels “pragmatic and technical texts”. This includes a large bulk of technical texts (e.g. patents, technical descriptions, operation manuals, etc.). The language of scientific papers occupies the position in between fiction and pragmatic and technical texts in terms of applicability of MT for correct interpretation thereof since, on the one hand, they are more formal in style than literary works and more precise in the terminological apparatus and therefore example-based programs, such as TRADOS can be used where the translator deals with sufficient quantity of the material. On the other hand, however, the translator frequently encounters new notions and terms introduced by researchers as well as occasional idiomatic language depending on the type of the text to be translated.

From the viewpoint of the quantity, pragmatic and technical texts occupy the largest sector of all translations.

“In specialized/technical translation, Computer Assisted Translation (CAT) tools (considered in the narrower sense of the term) form an indispensable part of the translation process itself in many current implementations.” (Andrew Rothwell, Tomáš Svoboda, 2019: 26 – 54).

Of special interest for the translators are the programs that are generally referred to as Translation Memory (TM-tools). They allow saving similar sentences from the original as well as its translation in the database. More voluminous text fragments can also be stored in the database, but only sentences are automatically fixed since the program processes text fragments from a full stop/point to full stop/point.

At the initial stage, the program automatically checks the existing database for the availability of the same or similar sentence and offers the available translation. Thus, over time, the database expands, which is especially true for translation bureaus where a large number of translators perform many similar translations. Programs of the TM category provide the function of terminological support, i.e. when a word or phrase that was marked as a term is found in previous translations, the program draws the translator's attention to this fragment and offers an existing translation option.

It should be noted that introduction of specialized courses on translation software in Ukrainian universities is still on the trial and error stage; the similar situation can be observed in many post-Soviet states. Many courses are dedicated solely to theoretical basics of MT and CAT explaining how technologies work, and what they are good for, setting aside practical application of translation software, although good practice is also available (European Master's in Translation. Competence Framework 2017: 1 – 12). There are at least two reasons for that:

a. In this country, like in many other post-Soviet states, computing and practical linguistics belong to different domains of knowledge and education. In simple terms, IT specialists do not know how to teach languages and translation, whereas translation educators know very little about IT.

b. The demand for translators of pragmatic and technical texts in these countries is satisfied mostly with specialists in the relevant field knowing some foreign language being normally better qualified in IT, rather than with professional translators; the additional bonus of that option is the possibility of qualified post-editing. Such translations might have deficiencies from linguistic viewpoint but are

generally correct in technical terms. (It should be noted, that the latter idea persists among employers in some European countries too.)

A different picture can be observed in the European educational space. Before the 2000s, the situation was similar to what can be presently seen in Ukraine; for instance, John Kearns strongly criticized European Center for Modern Languages Report where the “influence of CAT software is only mentioned very cursorily. Nowhere is it suggested that translators need to be taught about the Internet as a resource and, while the report acknowledged that there were “questions [about] how training programmes should respond to new technological developments which impinge on the work of translators and interpreters”, nowhere does it make any attempt to identify what these questions are, much less to answer them.” (Alexeyev N. E. Alexeyeva L. I. Syniova T. V., 2021: 8 – 14).

Certain deficiencies and narrowness in theoretical substantiation of introduction of IT in T&I training process have been mentioned by Andrew Rothwell:

“Even when papers on ‘technology’ are published in volumes dedicated to translation pedagogy (or even translation technology pedagogy), they sometimes say little or nothing about the teaching and learning of translation technology, concentrating instead on the intrinsic features or history of a given tool or technology.” (Andrew Rothwell, Tomáš Svoboda, 2019: 26 – 54).

The situation, however, has notably changed since the foundation of European Master’s in Translation (EMT) Network in 2009 by the European Commission’s Directorate General for Translation (DGT), the aim being the improvement of the quality of translator training in EU countries. Students who graduate from an EMT program are thus expected to know “how to use a variety of text processing, terminology management, and translation memory tools, among others; how to create and manage databases; how to adapt to new tools, especially those designed for the translation of multimedia and audiovisual material; and how to prepare and produce a translation in different formats and for different technical media.” (Andrew Rothwell, Tomáš Svoboda, 2019: 26 – 54).

By 2017, the framework had elevated “the ability to interact with machine translation in the translation process” to the status of “an integral part of professional translation competence” (European Master’s in Translation. Competence Framework 2017: 1 – 12).

According to the EMT Competence Framework, the technology competence includes the following:

“... all the knowledge and skills used to implement present and future translation technologies within the translation process, ... basic knowledge of machine translation technologies and the ability to implement machine translation according to potential needs.” (European Master’s in Translation. Competence Framework 2017: 1 – 12).

This area of competence is broken down into six actual skills:

1. using IT applications and the ability to adapt to new tools and IT resources;
2. using search engines, corpus-based tools, CAT tools, etc.;
3. pre-processing, processing and managing files and other sources within the translation process;
4. mastering the basics of MT and understanding its impacts;
5. assessing the relevance of MT in translation workflows and being able to implement MT where relevant;
6. applying supporting tools related to translation technology, such as workflow management applications (European Master’s in Translation. Competence Framework 2017: 1 – 12).

Theoretical grounding of modern developments in T&I pedagogy has gained additional momentum with the foundation of a number of specialized journals, such as *Revista Tradumatica* established in 2001 (*Revista Tradumatica*) and *The Interpreter and Translator Trainer* founded in 2007 (*Interpreter and Translator Trainer*).

The given period has witnessed attempts to cope with the challenges appearing in the new spheres where the work of translators was employed i.e. audiovisual translation and various types of localization; these efforts inevitably deal with the teaching and learning of software tools used in the various types of subtitling and in audio description e.g. Díaz-Cintas (Díaz-Cintas, 2008: 1 – 281).

It should be noted that some skills mentioned above are addressed to at Ukrainian universities within the course of general IT competence, moreover, certain attempts have been made to introduce specialized courses into the T&I training agenda. These efforts, however, are the result of particular enthusiasts’ experiments, rather than the generally accepted practice or centralized strategy. Furthermore, new developments in translation software occur so rapidly that the educators dealing with these courses who do not have IT competence at the professional level can hardly keep pace with the new achievements in this sphere. This puts special emphasis on self-study and post-graduate education. Similar ideas have been expressed, for example by Dorothy Kenny:

“It should be noted, however, that training in translation technology happens not just in universities and other higher education institutes, but also as part of the continuous professional development of individual translators working in the translation departments of large organizations or for language service providers. Technology providers themselves also offer training in the use of their tools, for example through online tutorials, demos and webinars, and training is also offered under the aegis of professional associations.” (Dorothy Kenny, 2020: 498 – 515).

She further justly remarks that “... experiential learning, with the workplace becoming the educational site par excellence” (Dorothy Kenny, 2020: 498 – 515) has always been and still remains a good possibility to keep pace with modern technology.

Thus, the following **conclusions** can be drawn:

- all modern translations are performed involving information (computer) technologies; the degree of this involvement and, hence, the volume of human/

machine “added value” depends upon the genre of the text offered for translation;

- T&I training, therefore, must combine traditional training including language teaching, specific theoretical and practical translation courses, experiential learning as well as IT training;

- The relevant IT education for translators should embrace both the general course and a course dedicated to translation software;

- It appears expedient to develop the relevant standards of T&I education and the above said courses for Ukrainian universities engaged in training translators; the European good practice in this sphere is indispensable;

- Since IT in the field of translation continuously develop, translators need to keep pace with the latest achievements of translation technologies and this is where a system of translator’s qualification improvement training is highly demanded; the European experience in this sphere is worthy of thorough study and adoption.

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