THE EVOLUTION OF THE TRANSLATION PROFESSION - FROM TYPEWRITER TO AI
VÝVOJ PROFESIE PREKLADATEĽA – OD PÍSACIEHO STROJA PO UI

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ABSTRAKT

Príspevok analyzuje vývoj prekladateľskej profesie od jej historických začiatkov až po súčasnosť, s dôrazom na technologické pokroky a ich vplyv na prácu prekladateľov. Opisuje prvotné nástroje, ako je ručné písmo a písacie stroje, až po moderné digitálne riešenia vrátane prekladateľských softvérov a umelej inteligencie. Skúma, ako sa prekladateľská práca transformovala z manuálnej činnosti na interdisciplinárnu profesiu, ktorá kombinuje lingvistické a technologické schopnosti. Príspevok tiež reflektuje budúcnosť profesie v kontexte pokročilých UI nástrojov a predpokladá vznik nových úloh, ako je transkreácia. Diskutuje o nevyhnutnosti zachovania ľudského faktora pre zabezpečenie kultúrnej autentickosti prekladov v technologicky vyspelom svete.

Kľúčové slová: Prekladateľ. Vývoj profesie. Transkreátor.

ABSTRACT

The paper analyses the development of the translation profession from its historical beginnings to the present day, with an emphasis on technological advances and their impact on the work of translators. It describes early tools such as handwriting and typewriters to modern digital solutions, including translation software and artificial intelligence. It explores how translation work has transformed from a manual activity into an interdisciplinary profession that combines linguistic and technological skills. The paper also reflects on the future of the profession in the context of advanced AI tools and anticipates the emergence of new roles such as transcreation. It discusses the necessity of preserving the human factor to ensure cultural authenticity of translations in a technologically advanced world.

Key words: Translator. Evolution of the translation profession. Transcreator.

HOME

The foundation of the translation profession dates back to 196 BCE and the Rosetta Stone. This slab of rock weighing 760 kg bears witness to the beginnings of translation since the inscriptions on it are in Egyptian and Ancient Greek. The written record counts on three different groups of recipients. The Hieroglyphic writing is for the upper classes, the Demotic Egyptian writing is for the officials and the Ancient Greek writing is for the Greeks living in Egypt. All three contain a decree for the abolition of taxes and instructions for the practice of the cult (Müglová 2018, p. 95). It is thus in the 2nd century BCE that we can trace the beginning of the translation profession. However, when thinking of the true beginnings, we have to refer to the 4th century CE and, in a sense, the most famous and important translator of the ages, St. Hieronymus, the Saint Patron of translators and the author of the first official translation of the Bible into Latin, known as the Vulgate.

1 The birth of the translation profession - in the beginning was the word

Translation originated in the ancient times because human civilizations have always needed to communicate with each

other. However, the first profession to ensure understanding between ethnic groups was interpreting or its predecessor, since it was rather different from what we understand by interpreting today. The reason for precedence of interpreting in human history is simple - while only oral transmission is needed for interpreting, translation needs writing to perform the act. When thinking of the profession of translation in terms of implementing technical devices, writing can *de facto* be considered the first tool that enabled translators to transfer records. Writing is the vehicle that guarantees the preservation of the idea. Unlike dynamic interpreting, where the spoken idea occurs in a unique instance in time and over time such an idea can be transformed, changed or even disappear (unreliability of oral delivery, circumstances affecting its reception, etc.), the translation is stable in preserving the idea to be conveyed in the target language to the recipient.

Even though translation enables people to preserve the words and pass them on to someone who does not understand the original in a language they can understand, the translators are aware of the drawbacks too: a text can be translated in different ways, the meaning of the words can be ambiguous, etc. The translators begin to realize that a word is not just a set of consecutive letters that denote an object and name things of the external and internal world. On the contrary, the power of such a word lies in the fact that it takes on a special meaning in a certain community and denotes a fact that comes to mind when uttered by those who have an identical idea of it. An example is the word *bread*, the equivalents of which perhaps exist in all languages. However, the perception of bread differs across languages and cultures. The taste, smell, shape and preparation of bread are specific to each culture, and the word 'bread' conjures up the image of bread that we are used to in our own culture. Translators are aware of these facts, not least because their task is to prepare the translated text so that the reader can understand it. The word '*prepare*' is particularly fitting in this context, as translation encompasses the en-

tire process and all the preparatory work required before the translator deems the final version complete and comprehensible to its intended audience. However, when does this occur and when can the translation be declared finished? This question has been addressed throughout the centuries by all those for whom translation has become a vocation and who have devoted their lives to its practice. The use of translation in interpersonal communication served as an essential tool for translators to assess its clarity and comprehensibility. This method was uncompromising. Either the translated text in the target language was understood, or it was not. For this reason, the French humanist, poet, writer, and philologist Étienne Dolet (1509–1546) outlined five principles of effective translation in his treatise La manière de bien traduire d´úne langue en autre, now regarded as the first theory of translation. Dolet's principles should be followed by translators in order to make their final translation comprehensible:

1. "The translators must, first of all, perfectly understand the meaning and the themes conveyed by the author being translated. If they succeed, the translation will not be obscure. If this is not the case, an author, otherwise easily understood, might become difficult and unreadable.

2. The translators must have an excellent knowledge of both, the language of the original and that of the translation. This is the only way how not to tarnish the illustriousness of any language. It is also necessary to acknowledge that every language has its particularities: metaphors, idioms, or nuances. If the translators ignore them, they endanger both the author and the language itself, because they do not respect the dignity or the richness of the two languages they are working with.

3. Avoid literal translation. If the translators do translate word for word, they demonstrate their own ignorance and lack of wit. To translate line by line or verse by verse often means to change the meaning that the author put into the text. The translators need not be slaves to the original, but they should strive for a looser but meaningful translation.

4. The translators should use everyday language, avoiding rare expressions and neologisms. Occasionally, they may use a word that is not commonly used, but this should happen only in rare cases.

5. The last piece of advice is crucial, and failure to follow it makes the whole translation seem cumbersome. The translators should compose the text in such a way that the textual euphony pleases not only the soul but also the ears" (Koželová 2017, p. 131).

Adherence to all these principles presupposes that the translators are people with inquisitive spirit, who read, educate themselves, travel, communicate as much as possible – in short, they are complex personalities who enable others by providing translations. Translation is therefore becoming an important and sought-after activity, and translators are among the most educated people because they know and read foreign languages and can communicate this knowledge to others. The translations need to reach people in order to ensure that they are educated. The printing press, which appeared in Europe in 1450, helps to achieve this.

The advances in science and technology do not disregard translation. The first tools of translators were, of course, parchment and calamus. In the Middle Ages, translators were mostly monks living in monasteries who transcribed and translated manuscripts. Translation was a manual activity in this period. Manuscripts were very detailed, and translation relied heavily on the translator's memory and personal knowledge.

2 Typewriter

The work of the translators has changed significantly throughout history due to technological advances. In the second half of the 19th century, manual translation gradually began to be replaced by the typewriter, a mechanical or electromechanical device that was used to write text directly on paper. Typewriters allowed for faster and more legible text production compared to handwriting. Before the advent of computers and word processors, the typewriters were the staple tool in offices, and a necessity for writers and translators. With the development of digital technology, their use has gradually declined. The work of a translator using a typewriter was vastly different from today's digital translation. The translators had to rely on their memory, knowledge and paper dictionaries, which slowed down the process. Moreover, even though the typewriter revolutionized the work of the translator, every mistake meant rewriting part or all of the pages. Whole passages had to be rewritten when the translation was revised, corrected and edited. The only technical convenience that facilitated the tediousness of the task was the correction labels, which made it possible to correct typing mistakes by tapping on a white tape.

3 Computer editors and processors

The next step in the technological development of the translation profession was the computer. "In 1989, a trio of Czech programmers (Jaromír Šiška, Richard Kaucký, Martin Šiška) developed an editor called T602. This well-known editor contained all the usual functions that enabled the creation of short and long text documents, and worked in graphical mode under the Microsoft DOS operating system, whose successor was gradually becoming the Micorsoft Windows series of systems" (Šalata 2010, p. 9). T602 is a now legendary word processor that originated in the 1980s in the former Czechoslovakia. Despite its short duration (the last version was developed in 1995), according to experts, it contributed significantly to the development of computer word processing and became popular due to its low hardware requirements and wide availability on platforms such as the IBM PC. For translators new to computers, the T602 editor revolutionised word processing by simplifying word processing and eliminating manual typing or the use of typewriters. One of the main advantages of the program was the ability to edit text, including alignment or paragraphing. It offered a variety of font styles, which was rare at the time. Compared to later word processors, the T602 had limited

functionality, but was reliable. It made it easier for translators to process and archive texts on personal computers. Unlike manual transcription of documents, it offered the possibility of quick corrections and editing directly in digital form. In addition to increasing translator productivity, the delivery of translations in electronic form on diskette enabled subsequent proofreading, which contributed to increasing the quality of the target texts.

In the 1990s, the word processor MS Word was developed, and gradually conquered the market of the Slovak translation industry as part of MS Office. MS Word is a word processor from Microsoft, which is currently one of the most widely used word processing tools. It provides users with the ability to create and edit documents with a multitude of features. For translators, Word is of significant value because it allows them to work efficiently with a variety of text files. The integration of tools such as annotation, change tracking and extensions for translation memories increase the quality and accuracy of the work.

4 Internet

A significant technological milestone in the translation profession is the Internet, which in the 1990s was difficult to access both in terms of price and technology for ordinary Slovak households, and therefore also for translators working from home. Therefore, many initially used the services of Internet cafés. The first Slovak Internet café was established in Banská Bystrica on 1 August 1996 and 12 days later in Košice.[1] Shortly afterwards, translators could also send translations from home by connecting to the Internet via a telephone line (so-called Dial-Up). The beginning of the new millennium was also the beginning of the Internet era in translation. New technologies (DSL, ADSL, etc.), cable connections and fibre-optic networks made data transmission by order of magnitude faster, making communication between commissioners and translators, as well as translation agencies as intermediaries, much more flexible and efficient. The translation market has ceased to be local. Translators started to receive and send translations not only within Slovakia, but all over the world. As a consequence of the simplification and speeding up of communication and the current globalisation of the translation market, the pressure on translators' expertise and the speeding up of processes increased. At the same time, the quality of professional translation was also coming to the fore, which gradually led to efforts to standardise the translation process in the form of the ISO 17100 standard, which is currently in force. The portfolio of translation activities has been expanded to include proofreading and evaluation.[2]

5 Computer-aided translation

An integral part of professional translation is computer-assisted translation, for which the so-called CAT tools (Computer-Assisted Translation) are used. These started to be developed in the 1970s and 1980s, but it was not until the rise of personal computers and the development of new software technologies that they became more widely used in mainstream translation practice. CAT tools assist the translator through automated processes that improve the efficiency and consistency of translations. They work on the basis of Translation Memory (TM), which is a database that stores translated pairs of texts (source and target language) in the form of segments, which are the most common sentences. If this tool detects a complete or partial correspondence with a previously translated segment during translation, it will offer a stored translation that the translator can edit or use. The translator has the option of simultaneously creating a terminology database (Termbase) or using a database provided by the client. The CAT tool then automatically identifies the terms in the source text that are in the database and offers them to the translator.

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[1] https://www.ecommercebridge.sk/historia-internetu-na-slovensku/

[2] Proofreading and evaluation of professional translations were carried out before, but the new technologies enabled the activity to be carried out efficiently.

With the advent of the internet and cloud technologies, CAT tools have become more accessible and flexible. Modern tools such as MemoQ, SDL Trados, Memsrource, Wordfast, Across and others enable team collaboration, sharing of translation memory and terminology database in the cloud, automatic quality control, implementation of machine translation and other advanced features.

6 Machine translation

The origins of machine translation date back to the 1930s. The first rule-based and later statistical or even hybrid translation systems were not applicable in real translation practice due to the high error rate. The breakthrough came in 2016, when Google switched to neural machine translation based on the Deep Learning Method. A year later, another translator working with neural networks, DeepL, came on the market and rivals Google Translate in quality.

In recent years, machine translation followed by post-editing has been a reliable and, foremost, more cost-effective counterpart to human translation on the translation market. In addition to pure machine translation, a hybrid form of translation is also used, in which machine translation is implemented in the CAT tool and used to translate segments without a match in the CAT tool's translation memory. In practice, the portfolio of translation activities has again been extended to include post-editing. This is the checking and editing of the target text produced by the machine translator. This activity, usually performed by translators, is challenging because neural machine translation offers content-coherent target texts of seemingly perfect quality, and the search for semantic and linguistic mismatches with the source text represents a high cognitive load.

The use of machine translation in translation practice has brought a lot of optimism and enthusiasm to the profession, on the one hand, but also a lot of questions and concern on the other. One issue is the possible risks arising from the use of machine translation. Ottman and Canfora (2020, p. 171) see a risk both in terms of liability for errors caused by machine translation, which can lead to damages, and in terms of the protection of confidential information and personal data when using free generic machine translation systems, which can thus become publicly available in search engines.

Another issue is the impact of machine translation on the socio-economic status of translators, the overall development of the profession's portfolio and the employment of novice translators. Although this tool has improved the availability and speed of translations, we believe that the human factor is still essential to maintain cultural and semantic accuracy.

CONCLUSION

Who better to consult about the future of the translation profession than AI itself – now a central figure in the story of translation? From its inception to its meteoric rise, AI has shaped and redefined its role in symbiosis with human translators. The question posed to AI was straightforward: What is your vision for the future of the translation profession in 2025, 2030, and 2100? Here is what AI predicts:

Year 2025: Translators in 2025 are increasingly supported by advanced AI tools that can translate texts with high accuracy. The translation profession is transforming into the role of "creative editors" who use these tools to check and improve machine translations. The emphasis is on cultural adaptation and contextual accuracy, making translators indispensable in the production of localised and marketing texts. Working with difficult, specialised texts - such as legal or medical documents - still requires the expertise of human translators.

Year 2030: Ten years later, translators' work is even more closely linked to virtual reality and augmented reality technologies that support simultaneous translation and language tours. Artificial intelligence is capable of deeper learning and can reflect subtle linguistic nuances, but translators specialise in artistic translations and the creation of multilayered texts that AI can't quite replicate. The concept of "multimodal translators" is also expanding, working with a variety of

media - from texts to videos and audio recordings.

The year 2100: In the far future, the year 2100, human translation work focuses almost exclusively on the creative and artistic side. Technology is so advanced that common translations between languages are instantaneous and natural in real time, using implanted devices and neural connections. Translators become "language architects" and "cultural curators," responsible for maintaining authenticity and humanity in literary and cultural works. Their work involves creating original works of art that cannot be fully replicated by technology, and overseeing the ethical use of linguistic and cultural elements in different media.

Over the centuries, the translation profession has been transformed from a purely linguistic to a highly interdisciplinary and creative one, while maintaining its unique position as a bridge between cultures and languages in a technologically advanced world. The cultural dimension dominates, as Perez, Zahorák et al. stress: "If we perceive the work or text and its translation as a specific manifestation of cultural expression, the translator acquires a crucial mediating role in its transmission to a different cultural environment. It is his approach that determines how he will bring the presented cultural reality closer to the reader, to what extent he will be able to enrich the intercultural dialogue between the source and target contexts, and whether this dialogue will be successful" (Perez - Zahorák - Hodáková - Koscelníková - Ukušová - Verebová 2024, p.13).

The answer provided by the AI also shows that it is still not perfect, as it refers to 2030 in terms of today (2024) as ten years later. However, AI holds a realistic view on the future of the translation profession. Its vision is similar to that of many who work in the translation industry. The translators are deemed to become transcreators. A transcreator is a professional who deals with transcreation - the process of creatively transferring a text from one language to another in order to preserve not only the meaning, but also the emotional and cultural radiation of the original. The term is often used today in marketing, advertising and creative writing, where it is important that the translated text is not just an exact translation, but that it is able to engage and appeal to the target audience in the same way as the original text. Thus, transcreation involves not only translation, but also adapting the content to the cultural and linguistic nuances of the target country.

The term transcreation was introduced in marketing and translation circles in the second half of the 20th century. The concept developed naturally within global marketing and advertising agencies that needed to communicate effectively with different cultures around the world. Although there is no single author of the term, its use has proliferated with the growing need to adapt international marketing campaigns to local markets and language specificities.

This seems to be the future of the translation profession. The humanistic factor will be inevitable, as confirmed by the development of translation studies so far in the perspective of an interdisciplinary approach: "For several decades now, researchers within several disciplines (ethnopsycholinguistics, linguoculturology, cognitive linguistics or precedence theory) have been concerned with the interrelation and interconnection of language and culture. It is necessary to realize that language is a part of culture, its product and at the same time its foundation" (Zahorák - Perez 2024, p. 43). The translator's competences will extend to working with text more generally, and the dominant competence of the translator of the future will be cultural competence. Thus, culture in the future will continue to represent the spiritual matter that can be better and more consistently understood by human beings. Context and explanation can undoubtedly be provided by AI, but the actual understanding and handling of the cultural charge will remain in the hands of the human.

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