






On Challenges in Translation – Contrasting Human and AI-supported Practices

Algunos retos de la traducción: contraste entre las prácticas humanas y las asistidas por IA

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Abstract — Translation practices could be characterised by some bumpy paths, challenging sections, even insurmountable obstacles, irrespective of language combination one works with. Metaphorical concepts, once found in the texts being translated, can only contribute to the complexity of the whole process. Being cautious with conveying the intended messages, hidden behind abstract language, avoiding calques, integrating culture-bound connotations, and, above all, finding the adequate counterparts in the target language/-es are common guidelines along the way. This paper aims to compare the translation practices of EFL students with those of AI-supported engines when translating English passages, brimming with idiomatic language, into Lithuanian. The decision to choose students over language professionals is based on the aspiration to – obtain an insight into their knowledge of metaphorical language and – to be able, at later stages, to introduce them, as future language teachers and translators to the practices and potential of machine translation. Strengths and weaknesses characterising both sides are discussed, accompanied with some implications pertaining to AI usage in pedagogical contexts.

Keywords — Translation, English, Lithuanian, students, AI.

Resumen — Las prácticas de traducción podrían caracterizarse por algunos caminos llenos de baches, tramos desafiantes, incluso obstáculos insuperables, independientemente de la combinación lingüística con la que se trabaje. Los conceptos metafóricos, una vez que se encuentran en los textos que se traducen, sólo pueden contribuir a la complejidad de todo el proceso. Ser cauteloso con la transmisión de los mensajes pretendidos, ocultos tras un lenguaje abstracto, evitar los calcos, integrar las connotaciones ligadas a la cultura y, sobre todo, encontrar las contrapartidas adecuadas en la lengua o lenguas de llegada son pautas habituales a lo largo del camino. Este artículo pretende comparar y contrastar las prácticas de traducción de los estudiantes de EFL con las de los motores asistidos por IA a la hora de traducir al lituano pasajes ingleses rebosantes de lenguaje idiomático. La decisión de elegir a estudiantes en lugar de a profesionales de la lengua experimentados se basa en obtener una visión de los conocimientos de los estudiantes sobre el lenguaje metafórico y poder, en etapas posteriores, introducirlos, como futuros profesores de idiomas y traductores, en las prácticas y el potencial de la traducción automática. Se discuten los puntos fuertes y débiles que caracterizan a ambas partes, junto con algunas implicaciones relativas al uso de la IA en contextos pedagógicos.

Palabras clave — Traducción, inglés, lituano, estudiantes, IA.

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1. INTRODUCTION

It at times appears that translation processes are almost inevitable when we deal with the topic of foreign language teaching and learning – sometimes because we intentionally teach and learn literary translation, simultaneous or consecutive interpreting; on some other occasions due to the fact that we see grammar-translation method as the most suitable for a specific unit/subject matter examined; in some cases, translation is a natural result of language transfer (either in a positive or its negative form) while we work on some tasks that, at first sight, do not directly ask for any activation of translation.¹

The fact that not every translation is equally challenging comes as no surprise – we are fully aware of different trainings literary translators are exposed to, compared to those needed by translators specializing in language for specific purposes – economics, law, medicine, engineering, dentistry included inter alia. The world of polysemy allows for an array of different meanings, sometimes hidden behind nuances, but at times conveying totally unrelated messages. In a similar vein, the world of stylistics, rich in metaphorical, abstract concepts – when on the table of translation can be a serious ordeal, even for those with exquisite language command. It seems that both humans and machines should approach such abstractions in a delicate way, as they commonly invite full activation of cognition and creation of specific bonds at the crossroads of cognitive linguistics, lexicology, semantics and pragmatics.² Cultural hues play a massive role here since not only metaphors but collocations, proverbs, sayings, and even phrasal and prepositional (fossilized) constructions usually find their roots, justification of their form in some culturally recognisable patterns, events, customs, or traditions.

We have been familiar with the ideas of computer-assisted learning (Donaldson & Haggstrom, 2009), machine learning and machine translation for decades now; machines have so far proved their reliability to a certain extent and in specific language scenarios (Okpor, 2014) – using them as starting points, helping hand offering us some initial ideas, paving the road to polished translation, intercultural exchanges, and many more – has become a standard, a routine we do not even question anymore. What underpins their potential is definitely the power of artificial intelligence – being further developed on a daily basis.

What both machines and humans have been doing so far when struggling with some tricky language patterns is, e.g., some lexical narrowing, broadening, or simply looking for semantically similar messages, despite the fact that their complexity might not overlap. Due to an ocean of internal, external, linguistic and other factors, it has always been the case that the process of calquing, i.e., using loan translations might happen. Translating word for word, especially in situations when we are not sure about the underlying meaning could be a two-edge sword; while calques³ might not always be harmful, once we embark on the ship of abstract language – relying

¹ For more about language transfer, see Gass and Selinker (Eds.) (1993).

² For more about conceptual metaphors, see Lakoff & Johnson (2003).

³ For more about calques, see Bullock (2012).



on this process might result in misinterpretation, face threatening messages⁴, failure of communication flow. It is believed this can happen to both machines and humans, due to countless cultural cues, contextual differences, polysemy and other phenomena.

2. MACHINES AND LANGUAGE AT THE CROSSROADS

As early as 1954, IBM showed us that machines can stand behind various translation processes – those including whole sentences as well (Hutchins, 1995). Anyhow, not all the voices of the critics of the time were affirmative – Koehn (2010, p. 15) reminds us of the ALPAC (Automatic Language Processing Advisory Committee gathered in 1964) case, i.e., the report addressing computational linguistics and stating how “post-editing machine translation output was not cheaper or faster than full human translation.” Apart from the economic side, consistency, accuracy, cultural awareness, contextual understanding, different variant-dialect-based nuances, and more – were often questioned when the phenomenon of machine translation was on the table.

Despite that, in 1968, SYSTRAN was established – one of the oldest MT dedicated companies, still on the market. It is a fact that the birth and popularisation of PCs, i.e., their growing availability on a global scale, supported many novel activities and definitely brought machine translation to more homes and offices during the 1990s. This is when we see the introduction of Trados, to be a helping hand to translators, and a couple of years later, Google Translate – maybe the most prominent player in the field (Koehn, 2020), the one innumerable numbers of people, natives to different languages, rely on daily.

The development of Google Translate practices led to the switch to the neural machine translation engine, that actually enabled the translation of whole pieces, sentences, passages, rather than in a fraction-by-fraction fashion (Vaezian & Pakdaman, 2018). The introduction of machine translation was seen as the dawn of a new era, the one that may have been promising and favourable for the MT destiny, but also may have resulted in some expectations and demands MT systems would not be able to meet (Vieira, 2020; Moorkens, 2022).

Present-day situation, some seventy years after it was announced that a machine can translate instead of a human, and almost two decades upon Google Translate integration into our activities, we are becoming the users of DeepL – that has been with us since 2017 and has in the meantime gained much popularity, still on the increase. Over the course of the previous couple of years, appraisal by satisfied customers, common internet users, people coming from different walks of life, as well as those who are more experienced in the field, has been noticed; in this respect, experienced translators have contrasted Google Translate, DeepL and Microsoft Translate – to conclude that it is DeepL that can recognise some nuance and natural languages cues better than its competitors.⁵

⁴ For more about face-threatening patterns, see Brown and Levinson (1987).

⁵ See Argondizzo (2022), for more.



2.1 Some Common Strengths and Weaknesses

Despite all the developments, it is usually questioned whether machines can always answer it all; cultural nuances, metaphorical language, all the shades and traits stemming from customs, traditions, those of contextual, discourse-dependent nature, where pragmatics plays a massive role are commonly listed as potential roots of problems; also, it appears that machines do not go hand in hand with all the languages of the world at equal speed. This comes as no surprise – even in the first experiments with machines, both those relying on separate words and those addressing whole sentences included English as either a source or a target language. The situation has changed over the previous seven decades – today, hardly can one think of a language we cannot find on the Google Translate or DeepL lists, yet it appears that English, as lingua franca, impactful language of intercultural communication (Crystal, 2009) might be the most trustworthy one in MT processes.

Machines we have met over the course of previous decades have shown that finding exact counterparts in (at least) two languages compared is not always possible and “choosing the correct equivalent(s) for one lexical entry in another language, is one of the most difficult problems that machine translation has to cope with” (Santos, 1990, p. 330) and the same goes for humans. While finding adequate counterparts in a target language is significant, what also matters, especially in the era characterised by extremely prompt exchange of information is the “speedy access to information, in whatever language” and this is where MT can help, by facilitating the “search and retrieval” (Quah, 2006, p. 90).

Given the potential of the AI phenomenon, and the fact that machine translation engines today take pride in very rich language banks, i.e. massive corpora, it would be expected they do not face any trouble when recognising and translating wide spectrums of lexical combinations – moreover, some insights into MT potential have confirmed that it can even beat traditional dictionaries in terms of recognising collocations, and different forms of phrases (Bahri & Mahadi, 2016). In a similar way, the investigation of Fiederer and O’Brien (2009) also speaks in favour of MT development, growth and increased reliability.

Aside from mere translation-wise helping hand, it has been concluded that MT could be of use when it comes to grammar as well – and increase awareness of some prepositional phrases, adequate choice of tense, even false friends, etc. (Ebbert-Hübner & Maas, 2017). This is another confirmation of MT growth, should we take into consideration some findings from the first decade of the millennium – that listed (to mention but a few) word for word translation, grammatical slips, problems with idiomatic language patterns, etc.

Relying on MT in educational contexts, both its advantages and disadvantages taken into consideration, could be a double-edged sword; while some educators and students highlight the obvious benefits, others are still apprehensive about potential misuse and threat to academic purity and ethics. As for the former, supporting self-regulated, autonomous activities, as well as improving lexical, reading skills, have been mentioned, inter alia (Wong & Lee, 2016).

Some other studies conducted so far also point to how is MT welcomed among student-teacher population, like the one conducted at Duke University, where student population expressed great approval (around 90%), while teacher population was not that supportive of MT practices and its



usage in academic setting (around 80%) (Clifford, Merschel, & Reisinger, 2013, p. 44). In this regard, some mixed feelings on the part of students could have been felt so far – seemingly depending on the culture they belong to; for instance, while the majority of the observed Korean students (around 60%) claim that machine-supported translators can strongly help them (Briggs, 2018, p. 13), German students, on the other side, might feel they have been cheating in case they have relied on MT help (White & Heidrich, 2013, p. 241).

Calvo-Ferrer (2023) explored translation of subtitles by students and AI-supported engines (the translation pair of Spanish and English); despite the fact the two groups examined show similarities when it comes to subtitles per se, the versions aimed at the deaf and hard of hearing still ask for some human activities; the study concludes that there are still some niches in the field of AI translation that should be approached with delicate care and oversight.

A decade earlier, Precup-Stiegelbauer (2013) investigated the usefulness of Google Translate in the process of translating literary texts from English to Romanian and vice versa; and was not satisfied with what was revealed; while some words were omitted, it was also noted that affixes could be an obstacle for Google Translate of that time.

Working on a different translation pair, that is – English and Arabic, Muftah (2022) contrasted the accuracy of machine translation to the one conducted by humans. Both Babylon Translation and Google Translate took part in this investigation – and their results were compared with the translations produced by undergraduate students, as well as expert translators. It was concluded that MT could lay excellent foundations for human experts – save their time and make more efficient rather than substitute them totally.

3. THE CASE

With the aim to investigate the current potential of AI-generated engines, when translation activities are at play, as well as to compare it to the potential exhibited by students, EFL learners, the study was conducted, based on the assumption that, despite all the advances in technology, humans still excel at performing quality translation. An authentic texts in English, designed for the purpose of the investigation, comprising a number of idiomatic expressions were used to achieve this goal; both a group of students, majoring in English, with the English level proficiency estimated at B2-C1, and an AI-generated engine, free DeepL version, were given the same task – to translate the texts from English into Lithuanian (students' mother tongue), with specific focus on metaphorical patterns listed below. The investigation focused on student population, rather than English language teachers, practitioners or seasoned translators/interpreters for two reasons; first, to obtain a deeper insight into their knowledge of the selected metaphorical language commonly attributed to the language proficiency level they are supposed to show; second, to explore the potential of the engine and share it with the group of students – many of which are future language teachers and/or translators.



The selection of expressions for translation:

OFF THE BEATEN TRACK

TO BITS

JUST WHAT THE DOCTOR ORDERED

TRAVEL LIGHT

WINE AND DINE

NOTHING TO WRITE HOME ABOUT

RECHARGE YOUR BATTERIES

BUCKET LIST

ON A WHIM

TRAVEL ON A SHOESTRING

GO THROUGH THE CEILING

ROLLING IN DOUGH

ENJOY TO THE FULLEST

HAVE A WHALE OF A TIME

The results yielded by the two groups, along with the official translation of the idiomatic expressions into Lithuanian (supported by the Anglonas dictionary) are illustrated in the table below:

Table 1. *Comparative Analysis of English Idiom Translations*

| Expression | Dictionary-based translation into Lithuanian | Group 1 - students | Group 2 - DeepL (where the engine suggested different language for the idioms with and without translation, a comment has been added) |
|------------------------------|---|--|--|
| OFF THE BEATEN TRACK | Nuošalioje vietoje, mažai žinomas | 19 correct answers (the meaning is maintained but the translation does not seem professional) e.g. [Nepaisant to, kad el pueblo yra nuošalioje vietovėje...] 15 incorrect answers e.g. [Nors ir „El Pueblo“ yra tiesiog neįpastame kelyje...], [...kad „El Pueblo“ yra tiesioginė to žodžio prasme neįprastam kelyje...] | ne įprastuose keliuose – wrong translation – translated as in not usual ways, which is a different concept |
| TO BITS | No translation in dictionary | No correct answers Students tend to omit this idiom | Praleisti ten į gabalėlius – wrong translation – translated as pieces |
| JUST WHAT THE DOCTOR ORDERED | Kaip tik tai ko reikia | 4 correct answers 30 word for word translations (doctor's prescription) e.g. [...kaip tik gydytojas liepė...], [... tai tiesiog ką daktaras man liepė...] | gydytojo nurodymu – correct but more direct, the word doctor is included here |



| | | | |
|-----------------------------|----------------------------|--|--|
| TRAVEL LIGHT | Keliauti be didelio bagažo | 12 correct answers e.g. [Mano pasirinkimas nepasiiimti daug daiktu buvo teisingas...] 3 omissions 19 incorrect answers (even though it seems that the students understood the meaning, they failed to find an equivalent expression in the target language) e.g. [Mano pasirinkimas keliauti lengvai...] | Keliauti lengvai – wrong, translated as travel easily |
| WINE AND DINE | vaišintis | 13 correct answers (the meaning is maintained, but the translations lack professionalism) e.g. [...jeigu ir norėtų, net šeimninkai negalėtų mūsų taip palepinti.] 1 omission 20 incorrect translations [...net jei šeimninkai ir norėjo, jie negalėjo suteikti galimybės mums pavalgyti ir išgerti.] | Vynas ir vakarienė – wrong – translated as wine and dinner as nouns |
| NOTHING TO WRITE HOME ABOUT | Nėra kuo girtis | 25 translations were correct e.g. [...nėra apie ką išpūdingo papasakoti...] 9 translations were incorrect (the students applied word for word translation strategy) e.g. [...kad dėl „el pueblo“ namo rašyti nereikia,...] | nieko, apie ką būtų galima rašyti namuose – wrong as it is translated literally – nothing what you could write at home |
| RECHARGE YOUR BATTERIES | Atgauti jėgas | 14 translations were correct e.g. [Taigi, jeigu nuspręsi jog nori pailsėti, ...] 1 omission 19 translations were incorrect (the students applied word for word translation strategy) e.g. [...nuspręsi įsikrauti savo vidinę bateriją...] | įkrauti baterijas – wrong, direct translation – charge batteries |
| BUCKET LIST | No translation | 26 correct translations e.g. [...kokios šalys yra jūsų norų sąrašė?] 7 incorrect translations [Kai kalbama apie keliavimą, kas yra jūsų svajonių kibirėlyje?] 1 omission | kibirų sąrašas – wrong direct translation |
| ON A WHIM | Užgaida, įnoris | 27 correct translations (the meaning is maintained, but the translations lack professionalism) e.g. [Kai kuriem žmonės skrydžius užsisako spontaniškai,..] 6 incorrect translations e.g. [...žmonės užsisakinėja savo atostogas numojant ranka...] 1 omission | dėl užgaidos – quite correct |



| | | | |
|------------------------|----------------------------|---|--|
| TRAVEL ON A SHOESTRING | No translation | 27 correct translations e.g. [Žmonės, turintys ribotą biudžetą..] 7 incorrect translations e.g. [...žmonės dažnai keliauja apsikabinę batus..] | keliauti su mažu batų raišteliu – wrong, direct translation |
| GO THROUGH THE CEILING | No translation | 15 correct translations e.g. [... , kainos visada sukyla..] 5 omissions 19 incorrect translations e.g. [...kai kainos paprastai liečia lubas..] | eiti per lubas – wrong – direct translation but sounds odd in Lithuanian, which uses reaches the ceiling, not goes |
| ROLLING IN DOUGH | No translation | 21 correct translations e.g. [...kurie turi labai daug pinigų..] 2 omissions 11 wrong translations e.g. [... voliojasi tešloje...] | suvynioti į tešlą – direct translation, does not make sense in Lithuanian |
| ENJOY TO THE FULLEST | No translation | 2 correct translations 9 omissions 21 incorrect translations [...visą kas svarbiausia tai kad, tu praleistumei gerai laiką ...] | Mėgaukitės visapusiškai – partly correct, but there are better words/more natural than the translation of the second word |
| HAVE A WHALE OF A TIME | Nuostabiai praleisti laiką | 15 correct translations e.g. [...svarbiausia kad turi marias laiko..] 15 incorrect translations e.g. [... kurioje praleisi geriausia laiką...] 4 omissions | Turėkite daug laiko – wrong, it is translated as have a lot of time * more accurate when the context was provided (complete text) |

As already stated, the language characterised as abstract requires delicate attention and understanding in the processes of translation; failure to recognise idiomatic expressions and put them in the adequate context for the target language can with no doubt end in misunderstanding and influence communication flow in an irreparable way. Familiarising yourself with the context given, avoiding calques, being knowledgeable about the cultural nuances of the target culture, and being able to broaden or narrow down the translated expressions, in case adequate counterparts cannot be found, is just a fraction of what translators usually deal with.

The expressions selected for the purpose of this investigation are compliant to the premises above, especially when it comes to Group 1, that is - students; despite the fact that the expressions were provided in rich, illustrative contexts (two unified wholes, texts in the forms of letters written to someone you are close to), some of them were challenging and difficult to translate in Lithuanian.

Hardy, are there idiomatic patterns translated in an adequate way by all the students (34 of them) participating; however, it is a worthy note that there are idioms the meanings of which were conveyed rather successful by the majority of our participants – and these include: NOTHING TO WRITE HOME ABOUT, BUCKET LIST, ON A WHIM, TRAVEL ON A SHOESTRING; This is quite interesting to see, since the patterns are of different frequency, formality and transparency level, meaning that the students might have been exposed to them in different settings (formal, informal).

Some other expressions, like HAVE A WHALE OF A TIME, OFF THE BEATEN TRACK, GO THROUGH THE CEILING, RECHARGE YOUR BATTERIES – were partially translated in the right way, that is – there were similar occurrences of correct and incorrect suggestions/omission. Given the frequency of some of them, e.g. HAVE A WHALE OF A TIME and RECHARGE YOUR



BATTERIES, as well as the fact that related constructions could easily be found in many world languages, in what could be described as semi-formal and even informal register – higher success rate could have been expected.

Idioms that yielded the least number of ideas acceptable in the target language include ENJOY TO THE FULLEST, JUST WHAT THE DOCTOR ORDERED, TO BITS; compared to e.g. ON A WHIM, or TRAVEL ON A SHOESTRING, it appears that the former requires less conceptualisation; anyhow, Lithuanian native speakers, EFL learners, showed the opposite – translating some of the less common idiomatic expression more successfully than those used more frequently, even in everyday communication.

On the other side – the one supported by AI – the picture was also heterogenous. It is a worthy note that the engine was exposed to the expressions twice – with (whole texts submitted) and without context (the engine was asked to provide the translation of separate idiomatic patterns). When the meanings of idioms are rendered individually, they often result in inaccuracies; however, when translated within the context of a sentence, they tend to be more accurate. The idioms OFF THE BEATEN TRACK, TO NITS, TRAVEL LIGHT, NOTHING TO WRITE HOME ABOUT, RECHARGE YOUR BATTERIES – proved to be specifically testing – irrespective of the form they were translated in – with or without context. While the sequences ON A WHIM and JUST WHAT THE DOCTOR ORDERED were given their adequate counterparts in both isolation and illustrative environments, others were less precise – and dominantly translated more adequately when supported by context.

4. CONCLUSION

AI-governed tools have undoubtedly enriched our practices in many walks of life – and continue to develop; the fields of education, translation, languages, broadly speaking, are not exception in this regard. Over the course of a couple of previous decades, that is, since the middle of the twentieth century, when machine translation officially bloomed – we have witnessed some major steps in the field – the ultimate being the expansion of AI, that has found its place in machine translation practices as well. Although both positive and less affirmative voices have been raised about the potential of AI, what should be acknowledged is the fact that it can facilitate many of our activities, making them faster, smoother, and more effective. However, the jury is still out on whether AI can successfully substitute humans and whether we should advocate it.

Starting from the assumption that humans, despite all the technological advances, are still better at recognising metaphorical language patterns and translating them than machines are – the paper has contrasted their work. What underpins this assumption is primarily the premise that idiomatic expressions used in this investigation, with metaphors, i.e. abstract language in their background, require the activation of specific conceptualised windows of our cognition – those where stylistics, pragmatics and cognitive linguistics meet.

The results obtained are harmonised with the starting points; when translating from English (a foreign language) into Lithuanian (their mother tongue), a group of Lithuanian students, majoring



in English, was more successful than the AI-run engine of DeepL. It is worth noting, however, that Lithuanian, compared to some other world languages, is not the language of intercultural communication – and that its word bank, along with all the language nuances, provided by AI, is to be developed at some later stages. At the same time, it should be highlighted that the engine exhibits some context recognition, i.e. , it performs better when provided with a full context where the expressions are engrained, than when asked to translate the isolated constructions.

In the end, while we should not neglect the available technological advances that could support our activities, we should still be cautious about the extent to what we rely on them to perform some steps without any or limited oversight. When it comes to the fields of education, and translation (language teaching-learning practices included), although these conclusions have been reached on a limited set of data and unequivocally require further, deeper analysis, it could be said that AI, that is, machine translation, has improved – that we can even organise some useful educational sequences around it, use it to work on our language, assess its and our own potential, but that it is still delicate to be left alone and that humans, whatever the task is, are invited to give some final touch.

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