

Human Decision-Making and Editing Behavior in AI-Supported Translation: Evidence from EFL Student Translators

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ABSTRACT

Keywords: AI-supported Translation, Editing behavior, Decision-making process

Many recent studies have investigated different types of technologies and AI-powered tools employed, and perceptions and evaluation of the AI users in translation. This study further closes the gap of literature by examining students' behavior and decision-making process in different stages of translation tasks. The study was conducted with a group of 33 undergraduate EFL learners in a translation course in which AI tools were encouraged to use by the teacher. Data was collected from participants' self-reflection survey, and individual stimulated recall interviews. The findings indicate that students' decisions to employ AI are shaped by multiple interacting factors; rather than relying on AI uncritically, students positioned themselves as primary decision-makers, using AI selectively. Editing behaviors focused mostly on semantic and pragmatic, accompanied by higher-order cognitive processes. The study highlights the central role of humans and suggests that effective integration of AI in translation education requires careful pedagogical practice.

Introduction

Amid the current globalizing trend, proficiency in major languages, especially English, has become increasingly critical, promoting internationalization across all walks of life. Owing to this phenomenon, foreign-language and translation skills emerge as significant qualities for individuals in the professional world. This highlights the importance of language and translation education in the modern context.

As technology advances, numerous tools have been introduced to facilitate learners' journey toward enhancing their language competence (Duong, 2024). Zhang and Zou (2020) found that various technologies employed could offer benefits to language learning across different classroom activities, namely improvements in teaching strategies, content instruction, activities, and interactivity. Recently, the emergence of Generative Artificial Intelligence (GenAI) has further enhanced language-related fields, not only language learning and teaching,

but also translation and interpretation. In the translation industry, AI-supported translation (AI-translation) has been shown to achieve high levels of reliability and adaptability, outperforming traditional Machine Translation (Yuxiu, 2024). In terms of translation teaching, AI can also be an anytime, available, and cost-effective companion for translation learners and the training institutions (Chung, 2023; Wang, 2023).

Given the importance of translation, studies have examined the impact of AI on this discipline. AI tools can translate information from a source language to a target language by processing text, images, and videos, and there are diverse options available for translation, such as Google Translate, Google Lens, DeepL, and Alexa Translations (Özmat & Akkoyunlu, 2024). AI accelerates the translation process by handling large volumes of text, ensuring that translated words are generally consistent through the use of fixed databases and algorithms (Moneus & Sahari, 2024). By commencing the process with machine translation (MT) rather than from scratch, the time and effort required are significantly reduced (Zhang, 2025). Compared with human translation, AI translation is also more accurate in translating terminology (Fu & Liu, 2024). With further assistance from MT, the quality of the AI-translated work was also superior to human from-scratch translation (Zhang, 2025). Nevertheless, MT-assisted translation can be demanding for translators, as it still involves studying the source-language materials, analyzing the MT output, and revising as needed (Green *et al.*, 2013). Similarly, AI-based translators also have limitations in translating information and accurately conveying meaning in cases involving idioms, varied contexts, and cultural nuances. They also struggle with translating ambiguous expressions that require inference (Moneus & Sahari, 2024).

Much research has concentrated on exploring the diversity of AI options that can be employed to assist experienced translators in translation and other aspects, such as measuring the output quality of AI works and users' perceptions. Meanwhile, little attention has been paid to the decision-making process of novice ones on whether or not to use AI, and the strategy to use AI for supporting translation, which can be crucial for effective use of AI in this aspect. Therefore, this study aimed to investigate student-translators' decision-making process of translation in the AI era, to obtain insights into the factors translators consider when choosing AI tools, when to employ them, what to edit, and how they evaluate the process.

To direct the investigation toward desired outcomes, the research questions were set as follows:

1. What are the factors shaping decision-making for AI employment?
2. How do the students edit their AI-supported translation works?
3. What are their evaluations and recommendations for the AI-supported translation?

Literature Review

Language translation

Understanding the concept of language translation from the linguistic and communicative perspectives of various scholars is significant for providing a comprehensive theoretical foundation for translation practices. Early translation theory centered on the concept of equivalence between languages. According to Catford (1965), Nida and Taber (1974), and Wilss (1982), translation is defined as the process of substituting text in the source language with text that conveys the same meaning in the target language. It is considered a traditional aspect of translation practice that emphasizes equivalent meaning between the two languages. This was further developed by Newmark (1988) and Bell (1991), who expanded the author's role and defined translation as rendering the meaning of a text into another language in

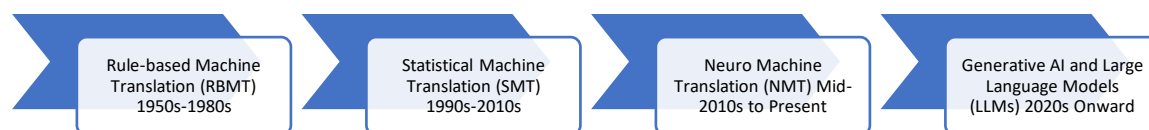
accordance with the author's intention. This viewpoint emphasizes the translator's duty to preserve the original author's communicative objectives when translating the text.

Several scholars define translation as a far more comprehensive form of cross-cultural communication (Hatim & Munday, 2004; Nord, 2001). Translation is considered an act of communication that serves to close cultural distinctions between different audiences, not just a linguistic transfer task. Besides comprehending the meaning extracted from a source language, a translator's job is to convey that meaning in the target text in line with the text's 'communicative purpose' or function in the target culture. Translators must have extensive knowledge of the linguistic distinctions required to interpret both explicit and implicit components of language, as translating from one language to another is a challenging task (Mohamed *et al.*, 2024).

From these perspectives, it can be summarized that translation practices require not only linguistic mechanics, semantic accuracy but also cultural mediation and stylist variations which aim to ensure the quality of translation products.

Figure 1.

The Revolution in Translation



The advancement in linguistics and computer science have greatly impacted on the development of translation practices over time, especially the emergence of MT. Hutchins and Somers (1992) define MT as using computerized system to translate speech or texts from one natural language into another, with or without human assistance. The early MT systems were rule-based approaches that relied on bilingual dictionaries and manually constructed linguistic rules between the two languages (Gaspari & Hutchins, 2007). However, the limitations included poor-quality translation, frequent inaccuracies, and high cost. Statistical Machine Translation (SMT) became widely available and increasingly employed in the 1990s. It was a data-driven approach that trains a machine to translate by analyzing corpora of human translations, selecting the most probable occurrences of words and phrases to translate a given word or phrase (Doherty, 2016). The SMT model had opportunities to thrive amid the explosive growth of the Internet and big data. When Google Translate first launched in 2006, it employed SMT, which significantly improved translation fluency. The system, however, encountered obstacles in dealing with uncommon words and sensitive contexts (Doherty, 2016; Koehn, 2009). Neural Machine Translation (NMT), which was introduced in the mid-2010s, has significantly transformed translation studies. Using neural network and deep learning technologies, NMT systems can analyze and learn from existing translation data and then generate translations of a given source text (Bahdanau *et al.*, 2015; Castilho *et al.*, 2017).

The latest development of MT is Generative Artificial Intelligence (Gen AI) based on Large Language Models (LLMs). In comparison with NMT systems, such as Google Translate and DeepL, which are designed specifically for translation, GenAI tools are developed for a broader range of natural language processing tasks. However, GenAI tools are increasingly recognized in translation practices and are becoming prominent in the field (Zhang, 2025). As they are both grounded in deep learning and neural networks, GenAI tools have shown much greater potential for generating translations, which are equal to or even superior to those of contemporary NMT systems (Lee, 2023; Yuxiu, 2024). As a result, with its impressive translation performance, GenAI is regarded as a type of MT.

In brief, the historical development of machine translation, from rule-based systems to generative AI, has marked a significant leap in improving translation quality and remains a meaningful area for future scholarly research.

Benefits of Machine Translation

The rise of MT and AI has profoundly impacted the translation industry, creating opportunities and challenges for professional and student translators, as well as educational institutions (He, 2021; Wang, 2023; Amini *et al.*, 2024). In general, AI tools have been proven effective at improving translation reliability, adaptability, and performance compared to traditional MT. Temporary studies on Generative AI (GenAI) claim that these tools offer advantages over human translators in terms of time and cost efficiency (He, 2021; Wang, 2023); working on lengthy texts (fluency), accuracy in terminology translation, and consistency in style (Algaraady & Mahyoob, 2025; Fu & Liu, 2024; Mohamed *et al.*, 2024; Tekwa, 2024). When collaborating with human translators by integrating pre-editing analyses and interactive inputs, GenAI models have dramatically enhancing translation which outperformed common MT models (such as Google Translate) (Qian *et al.*, 2023; Yuxiu, 2024). Prompting appropriately also aid GenAI models to deliver high-quality translations across a range of language pairs and domains (Wu *et al.*, 2025); accelerating text and speech translation to real-time image translation (Ki & Carpuat, 2024; Kwok *et al.*, 2025; Moneus & Sahari, 2024; Özmat & Akkoyunlu, 2024; Wang, 2023). Furthermore, integration of NMT with editing by human results in high-quality translation products (Amini *et al.*, 2024; He, 2021; Yuxiu, 2024). AI-assisted translation tools also offer more accessibility to available translation services worldwide, thereby boosting cross-cultural communication (Hartono, 2024; Mohamed *et al.*, 2024). The findings demonstrate the agreement of using AI as a “partner” or “assistant” to human translators, ensuring the fine quality of translation products.

Challenges and limitations of MT and AI-assisted translation.

Despite these benefits, AI-assisted translation modes present several challenges (Amini *et al.*, 2024; He, 2021; Mohamed *et al.*, 2024; Moneus & Sahari, 2024; Özmat & Akkoyunlu, 2024; Yang *et al.*, 2023; Yuxiu, 2024). As noted by Yang *et al.* (2023), MT encounters difficulties in understanding cultural variations and semantic implications that led to “limitations in cultural translation,” particularly for lexical mistranslations and complex sentence structures in Chinese English news translation. The finding is in line with Amini *et al.* (2024), which reveals cultural variations as an obstacle in MT. The issues of insufficient training data (Amini *et al.*, 2024) and insufficient emotional context (Özmat & Akkoyunlu, 2024), especially in literary or creative texts, lead to a low level of translation accuracy. Moneus and Sahari (2024) claimed that translating ambiguous expressions that require inference creates some barriers for AI tools.

Besides, some other major challenges for current AI translation models include the difference between grammar and syntax (Algaraady & Mahyoob, 2025), implied meaning and cultural association of language (Li & Daems, 2025; Wu *et al.*, 2025), and the failure to capture the original voice and tone of the source text (Wu *et al.*, 2025). The findings from Castaldo *et al.* (2025) and Algaraady & Mahyoob’s study (2025) highlighted that some AI tools provide literal (word-for-word) translations and cannot fully convey the meaning of idiomatic expressions. In some cases, the unique style and tone of the original text cannot be retained in the new AI-generated text (Kwok *et al.*, 2025; Wu *et al.*, 2025). Therefore, the translated text may lack natural flow, smoothness, and logical connection.

Human-AI collaboration in the editing stage

The integration of AI in translation field is transforming the role of professional translators (Wang, 2023; Amini *et al.*, 2024). Rather than being replaced, human translators are increasingly collaborating with AI in a “human-in-a-loop” or “robotic power and human qualities” model to leverage AI speed and human expertise (He, 2021; Özmat & Akkoyunlu, 2024). While AI plays a role in tasks such as increasing speed, generating initial drafts, and organizing text, human translators take responsibility for emotional and cultural aspects and for controlling the final translation quality. This aligns with other studies, which demonstrate that a human translator’s role remains significant in ensuring the “fidelity and naturalness” of a translation (Amini *et al.*, 2024), comprehend implications between the lines, interpret logical frameworks, and understand cultural subtext (Mohamed *et al.*, 2024). Therefore, the role of professional translators is shifting towards tasks involving proofreading, creative translation, and post-editing, as evidenced by dedicated editing teams at major companies such as Google and TAUS (He, 2021). PE is defined as the human correction of MT output to reach a specified quality level, involving editing a text pre-translated by MT systems rather than translating from scratch. In a broader understanding, PE is the process of checking, proofreading, and revising the output of automated translation (Gouadec, 2007). In other words, the role of a human translator is to check and edit an AI-generated draft to refine the final product (He, 2021). In the new working environment, professional translators are required not only to have expertise in specialized fields and excellent skills in translating cultural nuances and creative content (He, 2021), but also to have advanced technical skills to work with modern translation technology (Wang, 2023).

At the higher education level, translation teaching also faces an urgent need to adapt to these significant changes in the recent translation industry. Blamed for outdated teaching methods that fail to prepare students for the modern language services market, educational institutions are urged to employ new technology in teaching translation courses. The new courses related to MT, adopting modern translation tools and editing strategies, are essential for student translators (He, 2021). Students claim that their weakness lies in identifying and correcting errors in AI-generated texts; therefore, instructional modules should be included to enhance evaluation skills (He, 2021; Yang *et al.*, 2023). Moreover, future training courses should focus on pre-editing, editing, and prompt engineering skills (Wu *et al.*, 2025; Li & Daems, 2025). When it comes to PE skills, post-editors could employ light PE, which involves correcting inaccurate or misleading translations, or full PE, which aims to achieve both accuracy and fluency, as well as the style and format of the final products (Zhang, 2025). Also, critical AI literacy is required, as it indicates student translators’ digital competence and understanding of AI’s capabilities and limitations, which assist in interpreting AI-generated text (Kwok *et al.*, 2025). The results demonstrate the necessity of integrating editing skills modules into training programs for student translators.

In conclusion, contemporary scholars reach a consensus on the importance of editing phases in refining the final quality of translation products, and how translators use technologies to support translation and editing phases. Theoretically, it is significant to study the thinking process in greater depth, especially for novice/student translators who are still developing their skills and competencies. Recent research suggests that novice translators may rely heavily on machine-translation outputs and use post-editing as a learning strategy (Yang *et al.*, 2023; Wu *et al.*, 2025). However, limited attention has been paid to how these students decide when to employ AI and how they cognitively engage in the editing processes. Practically, this study also

provides a rigorous reference for translation trainers to gain insight into how their students perceive and use AI tools.

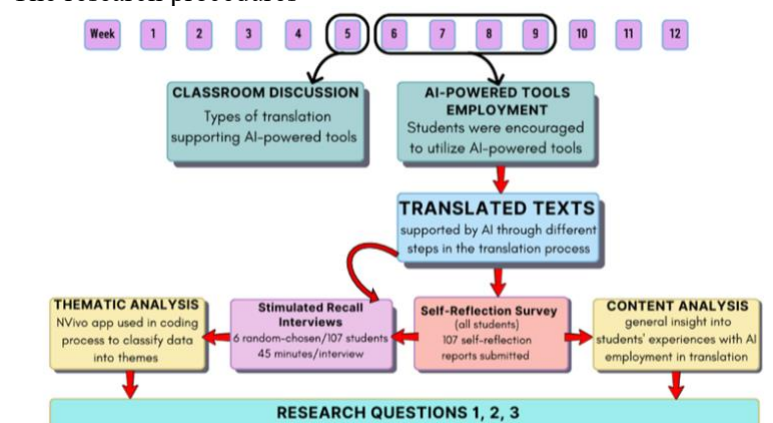
Methods

Research design

A qualitative, classroom-based exploratory study was conducted with a group of 33 undergraduate EFL learners in a translation course in which the teacher encouraged their use of AI tools. The data collection stages were conducted over five weeks (from week 5th to week 9th) within the course. Five weeks was the maximum period allowed for intervention, as the university's quality assurance policy did not permit significant changes to the regular 15-week syllabus. Initially, in week five, the 40 students in the class were informed of the research purposes and procedures and were allowed to decide whether or not to participate in the study. 33 students confirmed their participation and completed the self-reflection reports. The other 7 students chose not to participate because they could not fully engage in the classes during the 5-week intervention. Subsequently, students were instructed that when given a translation task, they could use AI to assist their translation process, whether to request AI to provide the work and edit it afterward or to study from the AI version and revise their own translated work, they had the right to make the necessary decisions for their translation process with AI support. The teacher also allowed students to discuss the AI tools they knew, which enabled them to "review" their prior knowledge before they started using AI. Over the next four weeks, the students used AI to facilitate their translation on various topics, and after each translation task, they were encouraged to share their thoughts in a self-reflection survey. In the self-reflection survey, students input data on various aspects, including the extent of AI assistance in their translations, the AI tools they used, their familiarity with the tools, their reasons for choosing them, their perceptions of AI's limitations, what they revised from AI-assisted translations, and their reasons for the revisions. This survey served as a resource for the researchers to select six students for subsequent stimulated recall (SR) interviews. These 6 students were selected based on variation in their AI use frequency and translation strategies. This purposive variation helped capture diverse perspectives on decision-making processes. SR interview, as defined by Gass and Mackey (2016) and Zhai *et al.* (2024), involves prompting participants to recall their thoughts during prior actions. It was also explained as "a technique that is intended to access cognitive processes during an event" (Gass & Mackey, 2016, p.14). Accordingly, the plan was that by giving appropriate cues, the recall of the mental process happening at the time of the actions would be most clearly stated.

Figure 2.

The research procedures



Data analysis

In the end, a total of 107 self-reflection reports were submitted and underwent content analysis (Mayring, 2000; Pope *et al.*, 2006) to help the researchers gain a general insight into students' experiences with AI use in translation as well as their editing processes. This approach was chosen for its suitability in analyzing large amounts of text-based data collected in the survey. Meanwhile, thematic analysis was the primary method employed to study the SR interview responses and understand the students' experiences, behaviors, or thoughts. Themes can be extracted either deductively or inductively from the collected data to answer research questions (Braun & Clarke, 2006). For these advantages, it can be both a flexible and powerful tool for analyzing qualitative data (Kiger & Varpio, 2020). Thematic Analysis was useful in this study, as it enabled the researchers to answer our predetermined research questions. From the SR interviews, key themes were derived, and the data analysis process was more systematic, logical, practical, and reliable.

NVivo was the tool employed for analysis. The recorded interviews were transcribed, and each transcript was uploaded to NVIVO to support the coding process. To enhance trustworthiness, the researchers independently coded the interview transcripts using NVIVO, then compared and discussed their coding schemes in groups until agreement was reached. Second, data triangulation was achieved by combining self-reflection survey responses with stimulated recall interviews.

Results

Research question 1

The coding process of in-depth stimulated recall interview data yielded the following 9 themes of factors that influenced participants' decisions to employ AI tools for translation tasks.

- Intelligence of AI-powered tools
- Advantages of AI
- The accessibility of the AI tool
- Encouragement from teachers
- Requirements of the task (workload, non-exam or exam, V-E or E-V translation, etc.)
- Different stages in the translation process
- Different genres and text-types
- Levels of cultural and emotional sensitivity to readers
- Translator's proficiency and confidence

All of the interviewees described AI as a technological revolution, and the world is changing rapidly with AI's support. In language learning, many AI tools and platforms can quickly and accurately understand and respond to human prompts and instructions. They also handle multimodal content such as spoken and written language, images, and videos; they serve as "machine experts" when students need them. According to one student,

"We are majoring in the English language; we do not have any specialized background knowledge in other specialized content when translating text. However, AI is very clever; it can understand the text very well and help us a lot in such cases" (St.2-para.4).

When asked which translation topics need support from AI, the students noted that contemporary AI tools can help in any context. However, they also claimed that the extent of AI employment will vary widely depending on context and translators' decisions. In addition, AI tools are, as the students believed, much more advantageous than traditional human translation, offering time-saving, grammatically accurate, convenient assistance; allowing

choices; fitting the unique purposes of translators; providing 24-hour assistance; automating tasks; and streamlining administrative work. These valuable assistants show how AI tools are revolutionizing language education and changing the way students choose to employ them.

Despite admitting that they would also seek AI assistance for translation tasks at home without the teacher's allowance, they are more confident and feel motivated when it is allowed and encouraged.

“As the teacher had allowed us to employ AI in this task, ..., he may expect more completion and better quality, I confidently decided to use and noted when and the reasons why I employed AI here, I also tried to learn more from how ChatGPT (the employed AI) has translated these sentences” (St.1-para.9).

The results of this study also show that teachers have an important role in orienting their students to employ AI tools when translating text. Teachers' encouragement can also impact students' attitudes and decisions in both in-class and self-study activities. Moreover, task-related factors also shaped students' decisions. Whether a student decides to use AI depends on their workload, the purpose of the task (for exam preparation or simply self-practice), and the task's requirements in terms of Vietnamese-English or English-Vietnamese translation. They reported that they tend to use AI more frequently due to heavy workloads or time constraints, and that AI will be more beneficial when used for self-study rather than for preparing skills for exams. According to them, *“exams do not allow the use of AI, so it's not wise to use AI with tasks to enhance translation skills for examination” (St.1-para.19)*. Besides, as they believed that they are more proficient in their mother tongue (Vietnamese), the necessity of AI employment seemed to be less important when the target language is Vietnamese compared to English.

The extent to which a student decides to use AI also depends very much on different stages of the translation process. In this study, results from both stimulated recall interviews and surveys show that students tend to use AI tools more often during the translating, editing, and proofreading stages than during the analyzing, researching, and submitting stages of translation. Different text genres are the next reason influencing how much students use AI tools during the process. Although the students in this study had to work on magazine extracts and news related to cultural, economic, and entertainment topics most of the time, they claimed that they would have to depend more strongly on AI if the genres are literary works, technical and legal documents, financial or medical reports, etc. Interestingly, according to some students, the AI tools they used may still have limitations in fully understanding the true meaning of language and the connections between language and genres or text types, which may lead to inaccurate translations. They, however, still need support from AI tools to compensate for their own limitations in genres and text types. Then, they suggested that a hybrid translation model in which the translator has to check and validate AI-generated translations is highly recommended. When students think there will be cultural and emotional sensitivities for readers, most of them tend to translate the text themselves or check the AI-translated text very carefully. Next, it is the student's proficiency and confidence that shape his/her decisions on utilizing AI tools. Less confident and less competent students seemed to report a more dependent habit of relying on AI when translating text. One student explained that

“when a student must employ a hundred percent AI for translation tasks, the employment may indicate that he/she is not confident in his/her ability and skill. As a result, he/she will not learn or practice anything. It will never be my translation practice” (St5-para 14).

Last but not least, the students often insisted that accessibility is crucial for them when using a particular AI tool. In the survey, 90% of respondents favor using AI and do so because “there is a free-of-charge version” and “no limitation of daily words or tasks”. This belief explains why ChatGPT, Gemini, and Google Translate are the three most popular tools. They sometimes combined or compared translations generated by other tools, such as Ask AI, Quillbot, TalkAI, and CoPilot.

Among the nine identified factors, Requirements of the task, AI accessibility, and Translator’s proficiency and confidence emerged as the most influential factors of AI use. These factors were mentioned by nearly all interviewees and were frequently repeated.

Research question 2

Although human editing has many facets and can involve different degrees of human control, results of this study show that students completed an AI-translated text with 3 following facets of behavior:

- Linguistic level of the edit and proofread (morphology, syntax, semantics, pragmatics)
- Types of edit and proofread (addition, deletion, substitution, replacement, reorder, rewrite)
- Edit and proofread behavior (validation, confirmation, examination, question, evaluation, self-reflection)

Linguistic level: The students reported paying much more attention to the output in semantics and pragmatics than to morphology and syntax. In the three interview excerpts below, the students were working on the “raw” AI translation output, producing better, post-edited versions to fulfill their real-world functions.

“I believe that ChatGPT can work quite well already on the grammar, its grammar and spelling are quite natively standardized already, the content in this part is quite special as only Vietnamese people know about this culture, it needs to work again on the information here” (St6-para17).

“In this session, I found that the tool could not understand well and mis-translated about Mr. Knight-the CEO Nike. It confused the meaning of his strategies to attract support from celebrities, then I revised the meaning in Vietnamese to make it clearer to readers” (St1-para19).

“... but in the last lesson, the word ‘Chinese authorities’ in the sentence ‘Chinese authorities oppose the trade war waged by US President Donald Trump’ was translated very well into ‘giới chức Trung Quốc’ in the Vietnamese language, I was quite surprised as the tool can understand the political context and made such a good translation” (St23-para19).

Types of edit and proofread: Reorder, substitution, replacement, and rewrite were given more attention and adopted frequently. And the most common purposes are ensuring coherent and good transition, consistent with concepts, sufficient with culture, and target readers.

“This extract needs to be translated to attract more tourists; the readers must feel the charm of the spot. We need a translation to visualize the beauty when they read. That's why I checked and replaced some phrases. I also rewrote 2 sentences in this paragraph” (St4-para11).

“I wanted to see whether the AI had changed the order and whether it had a better effect. I didn’t like the order of the source text in a session; it’s quite confusing and not very clear about the coffee-picking process. If I didn’t use AI to translate, I would still have changed the order when translating myself” (St16-Survey).

Edit and proofread behavior: The most common reported behaviors of editing and proofreading were validation and self-reflection. The interviews showed that participants perceived numerous benefits from self-reflection and validation, including improved accuracy, consistency, and comprehensibility of the translated text. The mental process was also claimed to be beneficial in improving translators’ competence and critical thinking skills. The students reported and confirmed that:

“Readers of this content are students and parents looking for scholarships and studying abroad opportunities. I gave such a prompt to the tool, then I checked whether it could understand the prompt and targeted the translated content to the noted readers” (St21-Survey).

“I completed the edition yesterday, but this morning, on second thought, I decided to divide the source text into smaller sessions... Then I checked how ChatGPT translated these small parts, whether they are similar to or different from the previous version when I prompted ChatGPT to translate the whole text” (St3-Survey).

“I learned from my experience that I should always check my own final text, ask myself again the reasons for my previous decisions” (St3-Survey).

Among different facets of behaviors and varied degrees of human control, when editing an AI-generated text, students appeared to pay more attention to semantics and pragmatics and employed validation and self-reflection strategies to reorder, substitute, replace, and rewrite text to improve their competence and the translation quality.

Research question 3

The findings show that students reported the following four themes of evaluations on AI-supported translation.

- Inevitable roles of AI tools for translation
- The im-perfection of current AI tools;
- The unreplaceable human roles;
- Necessary skills of translating from scratch;

When asked about the familiarity with the adopted tool to assist translation, a student claimed that:

“Previous to this translation course, I have used this tool (Genimi) for a lower course of translation and some other subjects as well. In this era of technology, AI tools are developed to help humans; we should employ such convenience in our translation in particular and learning in general” (St.28-Survey).

Other students also admitted that they were quite familiar with the tools they were employing, as they had used them previously for many learning purposes.

However, the students could also identify areas for improvement in the AI tools they employed.

“It’s (ChatGPT) clever, yes, it’s very useful, but still far from perfect. I’m not sure whether it comes from the quality of my prompts, but I’m not always satisfied with the

generated translation, especially when dealing with cultural and ethical terms” (St.1-para22).

Other students also reported occasional mistranslations and ambiguous meanings: *“I need to shorten this message, it’s quite long and a little confusing, we do not expect to read this way in Vietnamese” (St.1-para 24).* As the tasks in this course are simply general translation, news, focusing on popular NEWS extracts of daily-life content such as education, tourism, economics, entertainment, etc., the students rarely post ideas related to specialized translation.

Given that there are always shortcomings in AI-translated text, the students strongly believed that translators would need to continuously sharpen their skills and take a proactive role when employing AI tools. In any translation work, with any degree of AI support, the human role is indispensable for expertise, critique, experience, background, validation, and checking. According to the student coded as number 7:

“My skill is not as good as I expected in both English and Vietnamese, ..., but I only trust myself, so I need to check this session again” (para.16).

On the other hand, there were also concerns that the use of AI in ELT could lead to a dehumanization of language learning. Most of the students agreed that *“I must prepare myself for occasions when I have to translate from scratch” (St.28-Survey).* Some of them even stated that they could complete the task without AI (St.1, 8, 9, 21), and many times, the use of AI tools was minimal (less than 10% of the text length), and they evaluated themselves as taking a central role in the process.

In summary, the prevailing view of translators' perception of AI translation is positive, and most favor it. They also saw themselves as central in the translation process, and AI tools are employed as no more than assistants. Given their level of cognition and the requirements of the learning outcomes, the students did not mention any need for AI literacy training or any concern that AI tools would increasingly take translators' jobs. For the novice translator-students in this study, the quality of translation in any task is stated to be critically dependent on translator competence, the types of source text provided, the chosen tools, the quality of prompts given to AI tools, and the translator's willingness to post-edit.

Discussion

The factors shaping decision-making for AI employment

The findings indicate that students' decisions regarding the use of AI in translation are shaped by interrelated factors: AI tool-related affordances, pedagogical support, task requirements, and individual and cultural differences.

Tool affordances: Students perceived the intelligence and accessibility of contemporary AI-powered tools as key determinants of their willingness to use them for translation tasks. As Amini *et al.* (2024) highlighted, “AI has significant implications for the field of translation. It can improve the speed, accuracy, and efficiency of translation, making it easier for people to communicate across language barriers” (p. 740). Ferrag and Bentounsi (2024) added that current platforms such as Google Gemini, ChatGPT, and Claude can support language switching, accounting for both linguistic and “technical nuances” across various contexts and producing high-quality translations. Although the students' reports in this study were similar to these observations, they did not, importantly, evaluate AI intelligence as a justification for

uncritical employment. Rather, their recognition of AI's strengths always co-existed with its limitations, reinforcing a view of AI as a powerful but imperfect assistant in translation works.

Pedagogical guidance: Teacher encouragement emerged as an important mediating role in promoting students' AI-related decision-making. As Blazar and Kraft (2017) argued, students' behaviors are strongly shaped by teachers' instructions. "Teachers' classroom organization predicts students' reports of their own behavior in class" (Blazar & Kraft, 2017, p.147). The finding also seems to align with the argument of Amini *et al.* (2024), stating that "AI-based translation evaluation has been applied in various real-world applications, such as Machine Translation (MT) evaluations, translation quality assessment, and editing evaluation" (p. 741). In this study, explicit allowance and encouragement from the teacher appeared to foster more reflective and purposeful engagement with AI tools, aligning with Amini *et al.*'s (2024) observation that AI-based translation evaluation and editing practices are most effective when embedded within guided educational contexts. Thus, teacher encouragement did not merely increase AI use; it also influenced *how* students used AI, prompting them to document, justify, and critically reflect on their decisions.

Task requirements: Generating more details than prior research studies, such as Lee (2023), Škobo and Petričević (2023), and Zhang *et al.* (2025), the findings suggest that task-related variables such as workload, assessment purpose, translation stages, and text genre significantly shaped decisions for AI employment. Students reported greater use of AI tools for self-study, non-exam, high-workload, or other self-study tasks, and genre-specific but limited use of AI when preparing for examinations. This strategic differentiation clarified that AI employment in translation tasks was highly task-based rather than uniform.

Individual and cultural differences: students' self-perceived proficiency and confidence, and cultural reliance level, influenced the degree of AI dependence. Less confident students tended to rely more heavily on AI tools, whereas more confident students tended to work more on validation and comparison during the process. Moreover, students in this study demonstrated much caution when working on texts involving cultural references and emotional sensitivity. Their reluctance to rely fully on AI in such cases aligns with Amini *et al.*'s (2024) argument that AI systems may struggle to convey intended meaning beyond surface-level lexical alignment, particularly regarding cultural appropriateness and pragmatic nuance. Yuxiu (2024) also argued that when dealing with complex texts and specialized terminology in specific disciplines, rather than relying solely on AI tools, translators should adopt more efficient translation methods to meet translation needs. Therefore, it is crucial to ensure that translation outcomes are accurate, trustworthy, and acceptable to the target culture, and to minimize any negative emotional sensitivity for readers.

In short, many factors shape whether and how students use AI tools in their translation tasks. On one hand, the findings fit closely to theories of technologies acceptance models such as TAM (Davis, 1989, 1993) TAM 2 (Venkatesh & Davis, 2000), UTAUT (Venkatesh *et al.*, 2003) and UTAUT2 (Venkatesh *et al.*, 2012), which stating that variables of perceived usefulness, perceived ease of use, expectancy, facilitating conditions, voluntariness of use, etc. will have great impact on attitude towards using of a particular technology. On the other hand, the findings also contributed to the context of translation teaching and learning in that technology acceptance is strongly contextualized into the requirements of the task and text of translation. Their decision-making process is an interrelated process among reasons coming from the capability of AI tools themselves, from internal factors such as self-efficacy beliefs of the translators, and/or external factors such as requirements of the given text and the assigned task.

How students edit their AI-translation works

As a translator typically has some bias regarding the quality of AI-translated text in terms of its accuracy and reliability (Asscher & Glikson, 2021), editing will help the text meet the translator's desired standards of quality or those expected by readers (Egdom & Pluymaekers, 2019; Vieira, 2019). According to Melby (2019), a text translated by technology or AI “can be used ‘as is’, repaired by a post-editor, or made available to a human who translates from the source text” (p. 419). Consistent with Melby’s (2019) classification, students in this study rarely accepted AI-generated texts “as is”. Instead, editing functioned as a central stage through which AI output was evaluated, refined, contextualized, and polished.

Linguistic levels of editing: It was obvious that the students knew they needed to separate translatable parts of a text from untranslatable ones to avoid erroneous translations (Odacioglu & Kokturk, 2015). Traditionally, in-training and less experienced translators often pay more attention to morphology and syntax (Latief et al., 2022; Looock & Holt, 2024). With technology from about 10 years ago, machine translation still produced numerous errors in word forms and grammar (Wallwork, 2016). Nowadays, when perceiving that AI tools can use high-standard language with accurate words and grammar (Looock & Holt, 2024), but still tend to prioritize sentence-level accuracy over whole-text coherence, the students would invest more time working on coherence, semantic, and pragmatic levels of the translated text (Massardo et al., 2016; Melby, 2019; Vieira, 2019). This shift reflects broader developments in machine translation quality.

Types of editing and proofreading strategies: The students’ editing and proofreading behaviors found in this study were also reported in studies of Guerberof (2009), Lee (2020), Lee and Liao (2011), and Shin and Chon (2023). The scholars asked participants to edit raw machine-translation output and found that strategies such as reordering, rewriting, paraphrasing, inferencing, correcting, using synonyms, and adding words were commonly employed. Notably, in Shin and Chon’s (2023) findings, deleting and grammar correcting were more prominent than editing behaviors in this study. The differences of findings may come from different quality of machine translation outputs and problems related to machine translation systems (Koponen, 2016). These differences highlight how editing behaviors are closely shaped by both technological development and task context.

Cognitive and reflective behaviors: The present study supports the interpretation that confidence, familiarity with the subject matter, and perceived responsibility toward readers help mediate both editing effort and strategy selection. In Zhang's (2025) review of translators’ minds in the translating process, the most frequently reported processes are evaluation and self-reflection, such as the think-aloud protocol and retrospection. Interestingly, as Jia *et al.* (2019) noted, these cognitive processes for general language texts would be more time-consuming and cognitively more demanding. The authors claimed that this could be because their participants spent more time and effort re-editing the language and style of the general language texts than of the domain-specific texts. We would like to add another hypothesis that also stems from a translator's confidence and expertise in domain-specific translation work. The more insight he/she has on a topic, the less she/he would be dependent on AI tools. Importantly, high levels of editing and cognitive effort do not necessarily increase post-edited quality (Vieira, 2017); editing behaviors and quality depend heavily on factors such as the type of text being translated, the quality of the generated text, task requirements, and the translator’s competence and experience.

Students' evaluations and recommendations for the AI-supported translation

Students' evaluations of AI-supported translation were generally positive but also tempered by critical awareness. The intelligence and helpfulness of AI tools in supporting learning were widely acknowledged among scholars (Amini *et al.*, 2024; Chan & Hu, 2023; Ferrag & Bentounsi, 2024; Lee, 2023; Nazir & Wang, 2023; Rukiati *et al.*, 2023) and have been discussed earlier. It was noted that AI-based translation has many advantages over traditional human translation, including increased speed and accuracy, reduced costs, greater flexibility and scalability, and greater accessibility and affordability, which can make language learning more inclusive and individualized (Amini *et al.*, 2024; Rukiati *et al.*, 2023). Students in this study evaluated the AI tools they employed and, more importantly, their use in their translation work. Zhang *et al.* (2025), however, highlighted that, due to insufficient databases, it remains difficult for current GenAI tools to translate non-English languages, especially when working with high-context languages such as Chinese. Vietnamese is also a highly context-based language, and communication often involves complex, culturally embedded content, so the student might face greater challenges when working with AI-translated texts. The common current shortcomings of AI tools reported by scholars, namely redundancy, omission, mistranslation, unreliability, difficulty in understanding, many mechanical expressions and inappropriate styles, and dehumanizing language learning (Barrault *et al.*, 2023; Läubli *et al.*, 2018; Rukiati *et al.*, 2023; Zhang *et al.*, 2025) are all also mentioned by students in this study.

Overall, the findings suggest that students evaluated AI not as a replacement for human translators but as a flexible and helpful assistant whose value depends on informed, critical, and ethically aware human engagement. As technology advances, collaboration between AI and translators is becoming increasingly important, providing a unified, more efficient approach to language translation (Vela-Valido, 2021). Ferrag and Bentounsi (2024), Siu (2023), and Wang *et al.* (2021) called such collaboration "Hybrid Machine Translation", which combines different machine translation methods and techniques to make translations better and faster, and to provide more accurate and fluent translations. This model of translation positioned humans as indispensable agents responsible for judgment, cultural mediation, and final quality control.

Conclusion

This study offers a holistic understanding of EFL students' AI translation-editing behavior, including when and how they decide to use AI to accomplish translation tasks.

The findings have shown that students' decisions about employing AI-powered tools in translation are far more complex than mere technological dependence. Their decisions to use AI are neither similar to each other nor purely technology-driven; instead, they are shaped by an interrelated set of factors, including tool affordances, pedagogical encouragement and guidance, task demands, text genres, cultural sensitivity, and individual confidence. Although the students are aware of the efficiency and linguistic strengths of AI tools, they do not perceive AI as a full replacement for human work.

Throughout the translation process, most of the students' editing behavior occurred during the translation, editing, and proofreading stages, which primarily required human control. In linguistic terms, these student translators focused on the texts' semantics and pragmatics rather than on syntax or morphology. Whereas in editing and proofreading phases, more sophisticated strategies such as reordering, rewriting, and substitution are accompanied with high-order thinking behaviors like validation, self-reflection, and evaluation. Their reasons were not only

to ensure the coherence and consistency of ideas but also to satisfy targeted readers and to contextualize the quality of the translated texts. This critical thinking process is a strong confirmation of not being totally reliant on AI-powered tools, yet flexibly and smartly taking charge of machine translation as an assistant among novice translators. Apparently, these tools are treated more as supportive than as generative tools, even with appropriate instructional guidance.

Ultimately, the study highlights that, beyond various advantages such as impressive language-switching speed, grammatical accuracy, and accessible, affordable features, AI tools also have limitations regarding cultural and emotional nuances. This issue reminds student-translators about their central role of providing critical judgment and cultural awareness in this hybrid translation model. Students need to improve their academic competence to remain indispensable as human experts in ensuring the quality of their translation work. Students should always position themselves as the “lead translators” within the tasks, taking charge of defining AI’s role, critically reviewing and revising its outputs, refining the translations, and ultimately making the final judgments on translation quality.

Limitations and further recommendations:

Despite its contributions, this study focuses on a relatively small, context-specific sample. This may influence the generalization of the findings to other contexts. Differences in culture and education can lead to nuanced variations in perceptions of using AI tools in translation, especially during the editing and proofreading stages. Future research could recruit more participants from different higher education institutions. Secondly, GenAI tools will soon develop and be progressively substituted across successive generations; therefore, students’ perceptions and decision-making factors regarding AI use will surely transform. As a consequence, a longitudinal study should be conducted in future research.

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Biodata

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