Introduction II – An experiment of didactics: Translating politics – AI-assisted translating of political research

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The decision to involve students from the Institute of Japanese Studies in the translation and publication work made it possible to publish this special edition on the VSJF 2025. This objective was accomplished by offering a course entitled 'Translating Politics – AI-Assisted Translation of Political Research' during the winter semester of 2024/2025, designated as a 5-ECTS module. However, given that the texts to be translated were specialised political science texts, which consists a type of text that students typically encounter only late in the bachelor's programme, we endeavoured to make the project as accessible as possible to as many students as possible. To achieve this goal, we first had to consider how to design a course that would be open, interesting and educational for students with varying Japanese language proficiency.

My previous work indicated that artificial intelligence has the potential to transform the field of translation didactics. Therefore, it seemed a logical progression to initiate the study precisely at this point: students were given the opportunity to use AI as a tool for translating subject-specific Japanese texts. The objective of this approach was twofold: firstly, develop a better understanding of the capabilities and limitations of various tools, and secondly, to encourage an open dialogue about AI assistance in translating. However, the challenge in implementing this approach arose from the lack of publications addressing didactic considerations in the context of AI as a translation tool. Consequently, there were no existing guidelines that could serve as a reference point for our efforts. This led to the decision to develop our own concept. The following section describes the development process as well as the collaboration and testing process with the students.[1]

Conceptualising the course

With the exception of a few courses at the Institute of Translation Studies, this course was unquestionably among the first at the University of Vienna to address the topic of translation supported by artificial intelligence. The experimental nature of this course was communicated to the students during the initial teaching unit:

The aim was to experiment with various translation tools, to engage in a transparent discourse about their functionality, their respective strengths and weaknesses, and draw conclusions about possible didactic approaches for future academic settings. These conclusions were derived on the basis of empirical observations made by the students themselves.

The sixteen students who participated in the course had varying levels of Japanese proficiency, ranging from third semester bachelor's students to master's students. They were able to choose the AI tool to use independently and experiment with it. However, they had to carefully docu-

ment their work steps, input prompts and formatting in the text in order to clarify and explain the AI-supported translation process. The overall goal of the project was to attain the optimum translation possible from Japanese to English. The British Institute of Translation and Interpreting (2023)[2] has delineated the 'ingredients' for a successful translation as follows:

1. Fitness for purpose: The Japanese texts were composed for a specialised audience; therefore, the English translation should also be written in a language appropriate to the target audience.
2. Linguistic accuracy: It is imperative that sentences are translated from Japanese into English in a manner that preserves their original meaning.
3. Excellent writing: The target language must be articulated with such a high level of proficiency that native speakers are not given the impression that the text is a translation.
4. Cultural awareness: As is the case with 'linguistic accuracy', the cultural characteristics of both the source and target languages must be considered.
5. Subject expertise: A certain degree of specialised knowledge must be acquired to understand the technical terms characteristic of the respective field.
6. Quality assurance: A thorough review by the translators and subsequently by the editors is imperative.

Students participating the course were repeatedly informed that AI should be regarded exclusively as a translation tool. It was therefore essential that they had a sound and comprehensive knowledge of the Japanese language to accurately evaluate the quality of the AI's translation. AI-based translation tools such as DeepL have proven to be highly efficient and to deliver translations of a very good quality. However, these translations must be checked by someone with a high level of proficiency in Japanese, as AI tools often still have difficulties with more complex grammatical structures, context-based expression, and specific typographies.

For this course, Japanese language skills at the JLPT N3 level were recommended, but students who had not yet reached this level were also allowed to participate. Since the translation of each text was carried out in groups, care was taken to ensure that a wide range of language skills was represented in each group. This approach was chosen to encourage collaborative learning, with more advanced students providing assistance to their less experienced peers in the translation process. This approach proved to be highly effective; when asked, especially less advanced students confirmed that they had benefited greatly from working with their *senpai*.

The course commenced with a basic introduction to the concept of artificial intelligence, along with an examination of regulatory aspects that are particularly relevant in the university environment and the translation process applied to specialist texts. In this context, it is necessary to consider not only the provisions set out in the AI-Act of the European Union, but also the imperative of adhering to the principles of good scientific practice, the copyright provisions and the provisions of the General Data Protection Regulation. At the time of publication of this work, national regulations specifically relating to the use of artificial intelligence are not yet in place in Austria.

The following six AI tools were presented to the students as translation tools: DeepL, Google Translate, ChatGPT, Gemini, Yandex and Babelfish. The students were granted autonomy in their selection of tools, with the objective of ascertaining the most efficient utilisation for their respective translation processes. Furthermore, students were free to use their own proprietary tools, such as Yomitan, and were encouraged to experiment with a range of tools, not merely a single one. Nine students selected the translation service DeepL, seven opted for Open AI's generative AI ChatGPT, three utilised Google's translation service Google Translate, and two used Google's generative AI Gemini.

In addition, three students attempted to refine their linguistic expression through the utilisation of DeepL Write, a tool designed to assist with writing and proofreading. The students documented their work steps in translation and prompt logs. The subsequent section provides a brief overview of the utilisation of the various tools and the challenges the students encountered, drawing on these logs[3].

DeepL

The translation service DeepL has been found to produce literal translations, though it has not always been clear to the students whether a literal translation could always be considered 'successful'. Unlike ChatGPT and Gemini, DeepL does not provide supplementary information regarding the translations and does not embed the translations in a context. Consequently, the tool is devoid of 'ulterior motives'- insofar as such a designation can be applied to artificial intelligence – when translating, and endeavours to maintain fidelity to the text. DeepL is also equipped with a glossary function, which enables the user to access individual vocabulary words and to select synonyms for translation. This feature was found to be of practical use by the students. However, the students also identified certain issues, including the placement of punctation marks. Incorrect punctation, such as a full stop or comma, can result in 'confusion' for DeepL, leading to inaccurate or significantly different translations. Unnoticed space marks, that occasionally appeared in the original Japanese text between Chinese characters, separating words, also resulted in translations that were difficult to comprehend. In addition, DeepL demonstrated an inability to adequately process complex Japanese sentences, including nested structures, specific grammatical constructs such as *~da sō da* ~だそうだ [expression of hearsay; i.e. 'it is probably the case that...'] or *arui wa* あるいは [maybe, perhaps, or possibly][4], and the nuance of Japanese proper names. This led to errors in translation, including for example the addition of words to the original text. The students resolved these issues by utilising DeepL for sentence-by-sentence translation, instead of paragraph-by-paragraph translation. Alternatively, they used a manual method involving the decomposition of complex sentence structures into their constituent components, subsequently assembling the translated sentence elements themselves. Despite the aforementioned issues, DeepL was rated as both helpful and efficient in its general functionality.

Opinions on DeepL Write were more equivocal: while it was regarded as a pragmatic instrument for improving academic English phrasing, the students found its output too divergent from the source text, raising concerns about its reliability in the translation process[5].

ChatGPT

OpenAI's generative AI ChatGPT was not primarily developed as a translation tool; consequently, this application is significantly divergent from that of DeepL. The students had to use prompts to elicit the translation from Japanese into English from the AI, whereas the complexity of these prompts did not appear to exert a significant effect on the quality of the translation. However, the majority of the students using ChatGPT indicated that they were dealing with a scientific text and therefore expected the AI to translate in a scientific manner. As a result, the translations generated by ChatGPT were more expansive and less literal than those produced by DeepL.

Furthermore, it was evident that ChatGPT provided supplementary information about the Japanese texts without explicit instruction, and its responses exhibited a discernible bias towards certain topics, which manifested itself in a tendency to present translations in a specific perspective or 'hallucinating' parts of sentences and words with accompanying justifications, even in the absence of explicit student requests.

ChatGPT also encountered difficulties translating complex, nested sentences. For instance, relative clauses were not

always correctly assigned to their corresponding nouns. Occasionally, the system incorporated extraneous details, misinterpreted Chinese character constructions and translated active constructions as passive. This problem was evident, for example, in the comments of Japanese authors, who used first-person pronouns to articulate their experiences, reflections, and concepts. However, ChatGPT opted for a passive translation of these statements[6]. Nevertheless, ChatGPT was also capable of automatically replacing incorrect Chinese characters in the given Japanese texts, for instance, when they were recognised and transcribed incorrectly by the Optical Character Recognition (OCR) process, they were still translated correctly, which was perceived to be a labour-saving measure. In general, the students who employed ChatGPT for translation purposes reported a positive experience. The following comment illustrates this response: 'ChatGPT [is] generally more efficient and helpful when translating than DeepL'[7]. It is essential, however, to recognize the role of personal preferences in the assessment of technological effectiveness.

Gemini and Google Translate

In comparison with DeepL and ChatGPT, Google services (namely Gemini and Google Translate) were not particularly popular among students participating in the course. In fact, these services were used only minimally. Google Translate was used solely as a supplement to other AI tools, for instance to verify the translation received. However, students working with Gemini demonstrated a particularly strong aptitude for Google's generative AI. Analogous observations were made when using Gemini, akin to those previously reported in the context of ChatGPT. One student, for example, consistently used the same prompt when translating ('Please translate this into English.'), yet received varied translations for a single sentence, accompanied by supplementary information, explanations of concepts from the original Japanese text, or summaries of the content of certain sections of the text. The methodology used by Gemini to determine the inclusion of additional information and its accuracy was unclear. For instance, the student expressed dissatisfaction with the explanation provided by Gemini with regard to grammatical constructions.

It was also emphasised that Gemini translates more freely than DeepL, but, like ChatGPT, at least attempts to retain the meaning of a statement. Furthermore, Gemini appears to demonstrate a certain preference for converting extensive Japanese sentences into more concise English ones. This ability has proven advantageous in certain contexts, though it has also been noted that it can, on occasion, impede rather than facilitate translation[8].

Assisting AI with translating

All students were cognizant of the necessity to manually revise and refine the AI-generated translations themselves, in order to ensure the utmost accuracy by using their individual Japanese language proficiency and referring to non-AI-based online dictionaries. As previously stated, translation was carried out collaboratively, with the cooperation between students of varying proficiency levels proving to be particularly beneficial for the less proficient students regarding their language learning skills. The more proficient students also derived benefit from the arrangements, as they were subsequently able to fulfil a control function, for example, by verifying their individual translation skills.

The 'support measures', many of which were discussed in the previous sections, were intended to help make the different AI translating more accurate. These measures included breaking down complex sentences and sentence structures, dividing long sentences into several shorter units, isolating specific expressions for individual translation, and using proper names (e.g. on official Japanese government websites, in Japanese legal texts, or on Wikipedia).

In addition, it was necessary to substitute certain words in the text, so that the AI could translate it. To illustrate, in one

instance, ChatGPT refused to translate the word 'penis'; in this case, the student replaced it with an 'X', and the sentence was translated without difficulty[9]. In some cases, novel prompts had to be devised in order to translate particular sections of a sentence, such as the indication, that at a given juncture was a literal quotation from an English-language work that had been rendered into Japanese[10].

The adaptations made to the source texts in order to facilitate translation into English underscore this necessity for a comprehensive understanding of the Japanese language when using AI-assisted translating processes. While AI tools have proven effective in facilitating seamless 'holiday communication', certain text types, such as specialist texts, remain challenging for AI to translate satisfactorily. In this regard, the prevailing opinion among the students is not surprising: while there is a broad consensus that AI has the potential to be a beneficial instrument, it can, on occasion, result in frustration.

Concluding

In my opinion, it is important to encourage an open and constructive dialogue on the potential benefits and inherent limitations of artificial intelligence in the domain of language and translation. Implementing this approach has led to particularly remarkable results for students. Furthermore, an open discourse can serve counteract concerns that there is no longer a necessity to learn foreign languages because 'AI will do it anyway'. Only a deep understanding of a certain language and its linguistic peculiarities, as well as its embedding in cultural contexts, can guarantee a responsible approach to AI in translation. One of the students I taught in another course on the subject of AI as a tool in research and translation (in the summer semester of 2025) summarised the following conclusion: human thinking remains the fundamental aspect of any consideration regarding AI.

Artificial intelligence is a practical tool and must be understood as such. It can assist in the facilitation of processes, the generation of ideas and the identification of alternatives. However, it must be acknowledged that AI cannot substitute human cognitive input. In the future, there will be a growing need for didactic approaches and teaching formats will increase in order to facilitate the integration of AI as a tool. This is because AI will continue to exist, but it is unlikely to replace cognitive processes or the act of acquiring knowledge.

Endnotes

[1] The present article has been edited with the assistance of the translation service DeepL and the writing tool DeepL Write.

[2] Popplewell, Matthew. 2003. "6 Ingredients of a Good Translation", *Institute of Translation and Interpreting*. https://www-iti-org-uk.translate.goog/resource/6-ingredients-of-a-good-translation.html?_x_tr_sl=en&_x_tr_tl=de&_x_tr_hl=de&_x_tr_pto=rq#:~:text=2.-,Linguistic%20accuracy,language%20and%20the%20target%20language. (July 2025)

[3] The status of this information, as well as the students' experience of the functions of the respective AI tools, relate to the period from 1 October 2024 to 28 February 2025.

[4] Wollinger, Julian. Protocol from Milestone 1, p. 21, 23.

[5] However, the editors of this *MINIKOMI* edition employed the DeepL Write tool to refine the translations and enhance the English wording.

[6] Herzeg, Robin. Protocol from Milestone 2, p. 3.

[7] Steiner, Manuel. Protocol from Milestone 2, p. 1.

[8] Urban, Nina. Protocol from Milestone 1, p. 19.

[9] Biebl, Melania. Protocol from Milestone 2, p. 3.

[10] Herzeg, Robin. Protocol from Milestone 2, p. 2, 3.

[11] All English translations by Anna Linder. ChatGPT was utilised as a translation aid.

Bonus section:AI reflecting on AI: A collection of haiku 俳句

In one unit of the course, students were asked to reflect on their experiences with AI-assisted translation. The students were instructed to come up with three words and submit them to a generative AI model of their choice (in this case, all students chose ChatGPT). Subsequently, they had to ask the AI to compose an original *haiku* poem – a traditional Japanese poem consisting of three lines and 17 syllables – using the given set of keywords. Adherence to the 5-7-5 verse meter, a characteristic feature of the *haiku* form, was also imperative. The majority of these *haiku* were generated in German, the original form of which is presented here alongside the English translation, with an attempt to maintain the verse meter[11]. The *haiku* generated by the AI are by no means the most accomplished lyrical compositions, yet they undeniably prove to be entertaining.

Haiku #1 by the group 'Takeda'

Fehler türmen sich,
Tools stützen, doch zwingen ein –
Handarbeit bleibt Pflicht.

Mistakes pile up high,
tools support but still constrain –
hands must do the rest.

Haiku #2by the group 'Suzuki'

Im Kreis der Geduld,
frustrierte Schritte zählen,
ein Detail glimmt hell.

Circle of patience –
each frustrated step is tracked,
one bright detail glows.

Haiku #3 by the group 'Yamamoto'

Kontext wird gesucht,
die Schritte sind langwierig,
Nachbearbeitung.

Searching for context,
every step slow and tedious –
then, refinement starts.

Haiku #4by the group 'Nakano'

Hölzerne Worte,
repetitiv, doch mit Sinn,
durchwachsen blüht's still.

Wooden words echo,
same lines, yet meaning breaks through –
growth blooms in between.

Haiku #5 and #6 by the group 'Matsuoka'
(both originally generated in English)

Greetings softly shared
Translation bridges the gap
A kind offer: help.

Refine each nuance,
clarity blooms in the text,
compare paths to truth.

Haiku #7 by the group 'Suzuki'
(originally generated in Japanese)

Zasetsu shite 挫折して
Gaman no ita ga 我慢の糸が
Naiyō mitsu 内容満つ

Faced with a defeat,
thread of patience stretched so thin –
now it holds meaning.

Haiku #8 by Anna Linder

Leerzeichen verrutscht,
Frustration zieht Kreise,
DeepL hilft doch oft.

A shifted space mark –
frustration spreads in circles,
DeepL lends a hand.