

CHAPTER 4:

MACHINE TRANSLATION AND CULTURAL SENSITIVITY: A LESSON FROM INDONESIA

Teguh Sulistyو

(Universitas PGRI Kanjuruhan Malang)

sulistyoteguh@unikama.ac.id

A. Introduction

In today's digitally interconnected world, artificial intelligence (AI) is used massively in a variety of aspects of life, including education. Recent instructions have adapted AI-stimulated activities in the classrooms resulting in new paradigms of teaching-learning processes (Hasbi, 2024; Marhaban et al., 2025; Stojanov, 2023; Zhu et al., 2023). One such popular activity is the employment of machine translation (MT) which excels at converting words and grammatical structures (Chang, 2022; Kim & Oh, 2023), and it is considered imperative for overcoming language barriers (Sulistyو, 2024), although many have concerns about AI misuse (Ohashi, 2022; Yoon & Chon, 2022).

Translation, in general, is the act of changing a particular expression from a source language (SL) to a target language (TL). It sounds very simple, but it requires appropriate

approaches when doing a translation, especially when dealing with culturally bounded-expressions (Sulistyo, 2024). Although MT has developed dramatically with output becoming increasingly accurate (Ohashi, 2022; Yoon & Chon, 2022), it must take into account cultural sensitivity-awareness and incorporation of cultural values, idioms, beliefs, norms, and context-specific meanings from SL to TL. In Indonesian contexts, for example, there are many specific cultural communication styles such as idioms and culturally specific terms which cannot be translated directly from Indonesian to English (Hasbi et al., 2025). The idiom “*Buah jatuh tidak jauh dari pohonnya*” cannot be translated directly into English as “Fruit does not fall far from the tree” because the translation is not culturally accepted in English. Rater, it must be translated as “like father like son”, which is a specific idiom in English. Accordingly, a simple question arises as to how students and teachers deal with this issue, especially when translating culturally bounded-texts from Indonesian to English and vice versa. This paper, therefore, highlights machine translations and cultural sensitivity in a translation classroom that the author has experienced and used as one of his trajectories in the world of English as a Foreign Language (EFL) teaching.

B. Teaching Design

This part discusses the intervention of machine translation (MT) in a translation class, which is presented in a descriptive narrative tone based on the author’s experience

as an EFL lecturer. The intervention was presented in three stages: pre-, whilst-, and post-translation.

Pre-Translation Stage

To begin with, he raised a question of whether the students relied on machine translations, such as Google Translate, DeepL, or any MTs the students were familiar with. Then, he encouraged the students to use a machine translation in the class to translate phrases, sentences, or even short texts during class. However, he strongly suggested that they had to critically analyze the results of the machine translation-things that the MT sometimes missed due to cultural sensitivities and awareness of idiomatic expressions. Finally, he explained the objectives of the teaching-learning activities covering 1) comparing MT vs human translation, 2) identifying translation errors or in appropriate translations, and 3) understanding the importance of context and culturally bounded-expressions.

Whilst-Translation Stage

In this stage, firstly, the students (in small groups) read and compared pairs of translations (Text A and Text B) initiated by the lecturer.

1. Original text (Indonesian):

Kalau kamu merasa mengantuk, segera pergi ke pulau kapuk.

[Version A:]

If you feel sleepy, head to Kapuk Island.

[Version B:]

If you are sleepy, go to bed.

2. Original text (English):

Do as what Romans do while you are in Rome.

[Version A:]

Lakukan apa yang dilakukan orang Roma ketika anda di Roma.

[Version B:]

Di mana bumi dipijak, di situ langit dijunjung.

Then, they were asked to identify which one was MT work and which one was human translation. They were also encouraged to explain their choices, including any part that did not sound natural in the target language due to cultural terms. In fact, in response to Text 1, they confessed that Version A was translated by an MT which sounded unnatural regarding the term “Kapuk Island” because it was “a word-to-word translation” without considering that “*pulau kapuk*” in this context meant “go to bed to sleep” which was an Indonesia idiom. Meanwhile, to them, Version B was a correct human translation. In response to Text 2, they believed that Version A was the work of MT and Version B was human work. The original text was an English proverb that had the closest meaning to an Indonesian proverb “*Di mana bumi dipijak, di situ langit dijunjung.*” After deciding the translation style-MT or human-, students were stimulated to critically identify in what situations MT worked well and

where it failed to produce a natural translation from an SL to a TL without changing the meaning.

At the end of the main activity, the lecturer reminded the students that translation was not only an attempt to change an expression from an SL to a TL, but they also considered the intended message and found the closest expression in the TL. He led the students to discuss the strengths and weaknesses of MT in any translation work. Finally, to strengthen their understanding of MT, the students were given the task of finding 3 culturally bounded-sentences in Indonesian to translate into English with two styles: MT and human. Then, they presented their work by comparing MT and human translation to make sure which parts of MT could be taken and which parts should be revised due to cultural sensitivity covering idioms and culturally bounded-expressions.

Post-Translation Stage

In this stage, the students reflected on what they had learned about the use of MT in a translation work and why culturally bounded-expressions could not be translated directly using word-to-word translation done by MT and humans. By the end of the activity, they came up with an understanding that translating a message was not only a matter of changing the message from an SL to a TL, but they needed to consider the intended meaning that the sentence conveyed without changing the meaning. In addition, they understood the strengths and weaknesses of MT so that they

had to critically determine the closest expressions in the TL. In other words, cultural sensitivity plays a beneficial role in any translation consisting of culturally bounded-expressions.

C. Further Discussion

The intervention of MT in translation classes shows that artificial intelligence technologies have shaped new paradigms in English language teaching (ELT). However, mastering culture along with learning the language is essential (Hasbi, 2025; Ratnasari, 2019) because cultural sensitivity is a reflection of the diversity of society globally which is multicultural in nature (Sulistyo et al., 2021). Thus, translating a culturally bounded-message in an SL must be arranged according to the closest term in the TL. In this context, machine translation misses the cultural sensitivity of the TL (Sulistyo, 2024) since MT tends to translate an expression using word-to-word translation, neglecting culturally bounded-expressions, such as idioms, proverbs, or culturally specific terms. It is therefore important to equip students with some strategies on how to produce accurate translations using MT (Chang, 2022) without allowing them to rely too much on MT.

Comparing and contrasting sessions on the results of translations of MT vs. human stimulates students how to maximize MT without leaving cultural sensitivity in translation works. Students will be more critical in deciding the final product of translation by finding out the closest

expression between an SL and a TL term. It is the crucial role of the students' L1 in meaning-making in translation (Kim & Oh, 2023), which indicates the notion of “not relying too much on MT” even though the exploration of AI in education reveals a promising future (Orak & Turan, 2024; Ramirez & Esparrell, 2024; Tlili et al., 2023; Yamashita, 2021). In short, regardless of its strengths and weaknesses, MT is a promising educational tool that allows students to work quickly; however, teachers should provide them with appropriate strategies to produce the results of translation that are culturally accepted in the target language in order to keep the intended message or minimize misinterpretations.

Author

Dr. Teguh Sulistyo, M.Pd. earned his doctoral program from the English Education Department of Universitas Negeri Malang. He has been teaching English at Universitas PGRI Kanjuruhan Malang since 2004. His research interests include academic productive skills, language and technology, and teacher professional development. He has published some books and articles in some reputed journals. He can be contacted via e-mail at sulistyoteguh@unikama.ac.id. His publications can be viewed through Google Scholar <http://surl.li/kvkun>.

References

- Chang, L. C. (2022). Chinese language learners evaluating machine translation accuracy. *JALT CALL Journal*, 18(1), 110-136. <https://doi.org/10.29140/JALTCALL.V18N1.592>
- Hasbi, M. (2024). The ways QuillBot enhances English academic writing. In *Useful AI Tools for English Teachers* (pp. 29-40). Rizquna. <http://e-repository.perpus.iainsalatiga.ac.id/21413>
- Hasbi, M., Perdana, M. T., Madkur, A., Sari, E. D. P., Nor, H. (2025). *Powerful Vocabulary and Grammar Classroom Activities*. Rizquna.
- Hasbi, M. (2025). Vocabulary and grammar learning activities inspired by Squid Game TV series. In *Powerful Vocabulary and Grammar Classroom Activities* (pp. 1-13). Rizquna. <http://e-repository.perpus.uinsalatiga.ac.id/23502/>
- Kim, E. Y., & Oh, E. (2023). Machine translation use as translanguaging in content and language integrated learning: A case study in a general English course for global citizenship. *English Teaching (South Korea)*, 78(4), 59-82. <https://doi.org/10.15858/engtea.78.4.202312.59>
- Marhaban, S., Sulistyo, T., & Widiastuti, O. (2025). Artificial intelligent: Students' writing competencies and voices. *JEEL (Journal of English Education and*

Linguistics Studies), 12(1), 403-425. <https://doi.org/DOI: 10.30762/jeels.v12i1.3927>

- Ohashi, L. (2022). The use of machine translation in L2 education: Japanese university teachers' views and practices. *Intelligent CALL, Granular Systems and Learner Data: Short Papers from EUROCALL 2022*, 2022(2022), 308-314. <https://doi.org/10.14705/rpnet.2022.61.1476>
- Orak, C., & Turan, Z. (2024). Using artificial intelligence in digital video production : A systematic review study. *Journal of Educational Technology & Online Learning*, 7(3), 286-307. <https://doi.org/http://doi.org/10.31681/jetol.1459434>
- Ramirez, E. A. B., & Esparrell, J. A. F. (2024). Artificial Intelligence (AI) in education: Unlocking the perfect synergy for learning. *Educational Process: International Journal*, 13(1), 35-51. <https://doi.org/10.22521/edupij.2024.131.3>
- Ratnasari, D. (2019). The importance of cross-cultural understanding in foreign language teaching in the Asian context. *Bahasa Dan Seni: Jurnal Bahasa, Sastra, Seni, Dan Pengajarannya*, 46(2), 124-131. <https://doi.org/10.17977/um015v46i22018p124>
- Stojanov, A. (2023). Learning with ChatGPT 3.5 as a more knowledgeable other: an autoethnographic study. *International Journal of Educational Technology in*

Higher Education, 20(1), 1-17. <https://doi.org/10.1186/s41239-023-00404-7>

- Sulistyo, T. (2024). "Hi, I am a machine translator ready to help": Analisis penggunaan mesin penerjemah. In I. Arifudin, A. F. Gultom, G. Sarmidi, & T. Sulistyo (Eds.), *Interseksi kearifan lokal, sains, dan teknologi: Menghargai perbedaan mewujudkan kesatuan* (pp. 507-516). Kanjuruhan Press. <https://drive.google.com/file/d/1mk8n3GKzI62Wn2COflkPMbSg1bGIEebV/view?usp=sharing>
- Sulistyo, T., Sari, N., & Widiastuti, O. (2021). Relativitas bahasa dan budaya dalam komunikasi global. In A. F. Gultom, A. R. Hakim, & B. L. Wadu (Eds.), *Ideologi dan sains dalam integrasi pendidikan* (pp. 222-243). Kanjuruhan Press. <https://drive.google.com/file/d/1RCzDxxjZtgl8UJAgE7HR3lrSCEnAkO9a/view>
- Tlili, A., Shehata, B., Adarkwah, M. A., Bozkurt, A., Hickey, D. T., Huang, R., & Agyemang, B. (2023). What if the devil is my guardian angel: ChatGPT as a case study of using chatbots in education. *Smart Learning Environments*, 10(1), 1-24. <https://doi.org/10.1186/s40561-023-00237-x>
- Yamashita, T. (2021). Corrective feedback in computer-mediated collaborative writing and revision contributions. *Language Learning and Technology*, 25(2), 75-93. <http://hdl.handle.net/10125/73434>

- Yoon, C. W., & Chon, Y. V. (2022). Machine translation errors and L2 learners' correction strategies by error type and English proficiency. *English Teaching(South Korea)*, 77(3), 153-175. <https://doi.org/10.15858/engtea.77.3.202209.153>
- Zhu, C., ASun, M., Luo, J., & Wang, M. (2023). How to harness the potential of ChatGPT in education? *Knowledge Management & E-Learning*, 15(2), 133-152. <https://doi.org/https://doi.org/10.34105/j.kmel.2023.15.008>