CREATIVE APPROACHES TO TRANSLATION FOR LANGUAGE LEARNING IN THE AGE OF AI

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MODERN LANGUAGES

WITH WHICH PROFILE DO YOU IDENTIFY MOST?

AI Neutral
"I'm still weighing up the affects."

Wary AI Observer
"AI has negative impacts, but it doesn't affect me."

Cautious AI Time Saver
"I don't trust AI, but it will save time."

Concerned AI pessimist
"AI impacts my work negatively."

Careful AI optimist
"I'm excited, but concerned."

AI Sceptic
"I don't trust AI; I don't need AI"

AI Pioneer
"I fully embrace AI."

AI Challenger
"I'm completely against AI."

Categories adapted from
'Researchers and AI Survey Findings' (OUP: 2025)

AI TOOLS & THE FUTURE OF CRITICAL THINKING

Participant interviews on AI usage highlighted:

"three dominant themes: AI dependence, cognitive engagement, and ethical concerns." (Gerlich, p.20, 2025)

LANGUAGE-LEARNING IS OBSOLETE?

"In the age of artificial intelligence (AI), foreign language learning can seem like it's becoming obsolete. Why invest the time and effort to learn another language when technology can do it for you?" (Ramirez: 2024)

Article in *NewScientist* (May 2025)

Sparkes, M. 2025. Should you still learn a second language if AI can translate for you?

"I have long remembered a conversation I had 20 years ago with one of my professors, an expert in what we then called artificial intelligence … In this exchange, **he confidently told me there was no point learning a second language.**

BENEFITS OF LANGUAGE LEARNING

"Learning additional languages … stands out as one of the best ways to improve ourselves, with **benefits for brain health, social skills, cultural understanding, empathy and career opportunities**. An analysis of studies from 2012 to 2019 found speaking more than one language can enhance the brain's flexibility, delay the onset of dementia, and improve cognitive health later in life. …

In 2022, the Council of Europe emphasised **the significance of plurilingual and intercultural education for fostering democratic culture**, noting its **cognitive, linguistic and social benefits.**

And this year [2024], the council launched the "Language education at the heart of democracy" programme. The goal is to highlight **the importance of learning language for a fairer society.**" (Ramirez: 2024)

BENEFITS OF LANGUAGE LEARNING

"Learning a language goes beyond just communication; **it opens the door to different cultures, mindsets, and perspectives of the world**. … It opens up **new career opportunities, fosters deeper connections, enhances cognitive abilities and contributes to personal identity development**. While machine translation tools have their place and can be very useful, they can't replace the rich and nuanced understanding that comes with learning a language.

It's **a journey of discovery, a way to broaden your horizons and a key to unlocking the knowledge of cultures, history and experiences**. … something that no translation system or tool can ever provide." (Guest: 2024)

DUOLINGO

How many of you are currently learning a language on Duolingo?

Which language(s)?

How do you find it?

Pannas Tee Shirt

£20.00

In Stock

Highlights:

Pannas T Shirt

If you know you know!

For those of you learning welsh on Duolingo you'll know this word off by heart by now!!

Printed here in North Wales on 100% organic premium tee shirts.

Sizes Choose an option

- 1 +   Add to basket   Buy Now

Pay in 3 interest-free payments on purchases from £20-£3,000 with **PayPal**. Lear

PayPal   Pay

♡ Add to wishlist

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PANNAS
#IfYouKnowYouKnow

PANNAS AM BYTH

DUOLINGO

- Duolingo integrates AI into its systems.

- An 'AI First' company – "combining the best of AI and language science"

B. F. SKINNER: PROGRAMMED LEARNING

- 1950s – Skinner's 'Teaching Machine'
  - Operant conditioning
  - Reinforcement
  - Automated learning
  - Individualised learning
  - Immediate corrective feedback
- Teacher liberated from performing repetitive tasks
- Make teaching and learning more efficient

Skinner Teaching Machine (1957)
National Museum of American History
https://americanhistory.si.edu/collecti
ons/object/nmah_690062

B. F. SKINNER: PROGRAMMED LEARNING

- Little space for:
  - Reflection
  - Social construction of knowledge
  - Intercultural understanding

Skinner Teaching Machine (1957)
National Museum of American History
https://americanhistory.si.edu/collecti
ons/object/nmah_690062

SAME PROMISES, NEW RISKS?

- GenAI – promises to automatise and personalise learning thereby increasing productivity

- Potential downsides:
  - Lack of deep-reflection
  - Loss of cognitive autonomy and resilience
  - Less capable of independent thought / action
  - Reduction in critical engagement and accountability
  - Reduction in problem-solving skills
  - Diminished decision-making abilities
  - Loss of critical analysis / critical-thinking skills

"AI tools can enhance learning outcomes by providing personalised instruction and immediate feedback, thus supporting skill acquisition and knowledge retention". (Gerlich, p.2, 2025)

Humanising the teaching of languages in times of algorithms: Empathy, creativity and pedagogical judgement as guides in the era of AI (November 2025)

COMMON MACHINE TRANSLATION ISSUES

Machine translation falls down in the following areas:

➢ Idioms, metaphor, word play, double meanings,…

➢ Slang, swearing, new expressions – languages evolve constantly

➢ Lack of (inter)cultural knowledge

➢ Lack of contextual knowledge

➢ Inbuilt biases

➢ Tone, style, register, emotional subtleties, linguistic personality,…

➢ Literary devices, rhythm, alliteration, assonance, etc. – the poetics of language
- It often prioritises literal meaning over stylistic elements

Technology is not always at hand
- Good to be self-reliant and to be able to use the language regardless.

MACHINE TRANSLATION & THE HUMAN ELEMENT

"But while technology can translate messages, it misses an important component of human communication – the <u>cultural nuances behind the words</u>. … Merely relying on technology to translate between languages will ultimately lead to misunderstandings and a less rich human experience." (Ramirez: 2024)

"While AI-powered translation technology has its uses, a great deal can be lost if we rely solely on it to communicate. The nuances of languages, and what they say about different cultures, are difficult to communicate via translation tools. And the benefits of being bilingual or multilingual – both personally and for the wider community – risk being lost if we don't support second language learning." (Ramirez: 2024)

MACHINE TRANSLATION & THE HUMAN ELEMENT

"Machine translation, despite its efficiency, cannot replicate the cultural immersion that comes with learning a language. Spoken language nuances, idiomatic expressions, cultural references, and implicit rules that are second nature to native speakers are often lost in translation." (Guest: 2024)

AI LITERACY
FRAMEWORKS OF REFERENCE

TECHNICAL LITERACY

Understanding how LLMs are trained, what data they use and how answers are generated (via linguistic pattern predictions); learning the skill of prompt crafting

CRITICAL LITERACY

Developing the skills to analyse, evaluate and question GenAI results; understanding that these are algorithmic and statistical results, not the result of conscious thought; results may be partial, incomplete, biased, etc

ETHICAL LITERACY

Addresses the moral, social, ecological and humanist dimensions of AI use; understanding of ethical dilemmas surrounding AI usage including questions of authorship, transparency, privacy and equality.

Adapted from: Difusión, Humanizando la enseñanza de lenguas…, 2025

FOSTERING COGNITIVE RESILIENCE

"Striking a balance between leveraging AI and maintaining human cognitive engagement is critical for mitigating the long-term cognitive consequences of AI reliance."

"Educational interventions should therefore integrate critical thinking exercises and foster environments where students are encouraged to engage deeply with content rather than passively relying on AI tools. … [including helping] users [to] critically evaluate AI-generated content."

(Gerlich, 2025, p.14, p.23)

STEPPED TRANSLATION PRACTICE

Procedure

1. Translate the first paragraph without the use of any supports (no dictionaries; smart technologies; internet access, etc.). Feel free to continue to the second paragraph. [20 minutes]
   ➢ Take note of / underline any elements that caused difficulty

Class Discussion [10 minutes]
   ➢ Why did these elements cause difficulties?
   ➢ How could you solve the problems raised (without resorting to other supports)?

2. Return to your translation but with access to supports (dictionaries, etc.) [15 minutes]
   ➢ Be conscious of what you are using and why
   ➢ Make a note of what you learn for each difficulty / element

Round up / Review [5 mins]

TEXTUAL COMMENTARY

TASK: Comment on the register used in the extract.

Sample Commentary:
This is a narrative text by the Mexican author Juan Rulfo and there are a few traits of Mexican Spanish in the text, such as the use of diminutives. It contains both narrative sections, with an omniscient third person narrator, and sections of speech. The speech consists of a dialogue between two characters, the son, Ignacio, and his father. As these characters are known to each other, their speech uses informal language, such as *tú* forms. The language in these speech sections shows lots of oral qualities, such as repetition, questions, both direct and indirect, and command forms. The narrative sections are more formal and use a more poetic, evocative language using adjectives and adverbs, and consisting of both imperfect and preterite tenses, alongside other past tenses. The speech is predominantly in the present tense, though other tenses are used in longer speech sections which help provide a context for the narrative (lines 13-15). The narrative also uses a large number of continuous forms, mixed with imperfect tenses, particularly in lines 9-12 which helps create a sense of movement and repetition.

IDENTIFYING TRANSPOSITIONS

TASK: Did you use any transpositions? Give three examples and explain your decisions. (15 marks [5 marks each])

Definition taken from:
Introducing Translation Studies. Theories & Applications, Jeremy Munday (Routledge, London, 2012)

Grammatical Transposition
This is a change of one part of speech for another (e.g. noun for verb) without changing the sense.
Transposition can be obligatory or optional.
Obligatory – Me encanta la nieve. *I love snow.*
Optional – La frontera con México. *The Mexican border (The border with Mexico)*

IDENTIFYING TRANSLATION CHALLENGES

TASK: Identify a challenging sentence and explain why it was challenging to translate. (10 marks)

Such as:

- Cultural markers – cultural context

- Lexical difficulties / Vocabulary

- Idiomatic language

- Grammar / Syntax

- Style / Tone / Register

IDENTIFYING ERRORS:
MACHINE TRANSLATED TEXTS

- Students are given an original text and a machine-translated version

- Students must find a set number of errors in the translated text and explain why each error is a mistake.

Find <u>20 mistakes</u> in the Google Translate Spanish version of the text <u>and</u> for each one, <u>explain why it is a mistake</u>.

Each mistake and explanation listed carries a mark of 5%. To be awarded the full 5%, the element highlighted must a) be a mistake and b) have an accurate and coherent explanation for why it is a mistake. Partial marks will be awarded.

IMPROVING / EDITING: MACHINE-TRANSLATED TEXTS

- Students are given an original text and a machine-translated version

- Can they identify awkward sections / errors?

- Can they then improve (or edit) the text?

Puntual. Había sido puntual. Me puse las gafas y miré el reloj antes de entrar. Faltaban dos minutos. Abrí la puerta y fui hacia la barra. Hacía calor dentro y olía a tortilla de patatas. Ahí, acodado junto a un café, estaba el de la bufanda. Apenas me apoyé me dijo nos vamos. Doy una meada y nos largamos, y se metió en los lavabos. Me quedé parado. ¿Cómo sabía que era yo? En el televisor, que estaba encima de la cafetera, pasaban una película de Papá Noel. El camarero, con un palillo en la boca y secándose las manos con un trapo negruzco, la seguía. Al instante regresó el de la bufanda.

—Vamos.

—¿Adónde?

Me calibró.

—¿Vienes de parte de Joselito?

Asentí.

Punctual. He had been punctual. I put on my glasses and looked at my watch before entering. There were two minutes left. I opened the door and went to the bar. It was hot inside and smelled like potato omelette. There, leaning next to a coffee, was the one with the scarf. As soon as I supported myself he told me let's go. I took a piss and we left, and he went into the toilets. I stood still. How did you know it was me? A Santa Claus movie was playing on the television, which was above the coffee maker. The waiter, with a toothpick in his mouth and drying his hands with a blackish cloth, followed her. Instantly the one with the scarf returned.

—Come on.

—Where to?

He calibrated me.

—Are you coming from Joselito?

I nodded.

On time. I was on time. I put on my glasses and looked at my watch before going in. I had two minutes to spare. I opened the door and headed towards the bar. It was warm inside and it smelt of potato omelettes. There, with his elbows on the bar next to a cup of coffee, was the guy in the scarf. I'd scarcely leant on the bar before he said let's go. I'll have a piss and we'll get out of here, and he went into the toilets. I stood stock still. How did he know it was me? On the TV, that was above the coffee machine, they were showing a Santa Claus film. The barman, with a toothpick in his mouth, was watching it while drying his hands on a dirty cloth. The man in the scarf came back almost immediately.

"Let's go."

"Where to?"

He looked me up and down.

"Did Joselito send you?"

I nodded.

Punctual. He had been punctual. I put on my glasses and looked at my watch before entering. There were two minutes left. I opened the door and went to the bar. It was hot inside and smelled like potato omelette. There, leaning next to a coffee, was the one with the scarf. As soon as I supported myself he told me let's go. I took a piss and we left, and he went into the toilets. I stood still. How did you know it was me? A Santa Claus movie was playing on the television, which was above the coffee maker. The waiter, with a toothpick in his mouth and drying his hands with a blackish cloth, followed her. Instantly the one with the scarf returned.

—Come on.

—Where to?

He calibrated me.

—Are you coming from Joselito?

I nodded.

COMPARING TRANSLATIONS

- Students are given the original text and two different translations
  - Can be machine translations or official translations

- Which do they think is the most successful version and why?

Additions

- Translators own commentaries – does this change their initial appraisal?

CRITICAL THINKING

"Critical thinking, defined as the ability to analyse, evaluate, and synthesise information to make reasoned decisions, is a fundamental cognitive skill essential for academic success, professional competence, and informed citizenship. It involves various cognitive processes, including problem-solving, decision-making, and reflective thinking, which are crucial for navigating complex and dynamic environments." (Gerlich, p.1: 2025)

"… critical thinking… requires active cognitive engagement to analyse and evaluate information effectively." (Gerlich, p.2: 2025)

BRIEF BIBLIOGRAPHY

Carnegie Learning. 2025. *The State of AI in Education 2025: Key Findings from a National* Survey. https://discover.carnegielearning.com/hubfs/PDFs/Whitepaper%20and%20Guide%20PDFs/2025-AI-in-Ed-Report.pdf?hsLang=en

Difusión. 2025. Humanizando la enseñanza de lenguas en tiempos de algoritmos. Webinar.

Gerlich, M. 2025. AI Tools in Society: Impacts on Cognitive Offloading and the Future of Critical Thinking. *Societies* **2025**, 15, 6. pp.1-28. https://doi.org/10.3390/soc15010006

Guest, C. 2024. Why learning a language is better than using machine translation. https://www.pearson.com/languages/community/blogs/why-learning-a-language-is-better-than-machine-translation-2-24.html

Oxford University Press. 2025. Researchers and AI: Survey Findings. https://academic.oup.com/pages/ai-survey-findings

Peterson, A. J. 2025. Training for Obsolescence? The AI-Driven Education Trap. pp.1-16. Xiv:2508.19625v2 [econ.GN]. https://doi.org/10.48550/arXiv.2508.19625

Ramirez, E. 2024. With AI translation tools so powerful, what is the point of learning a language? *The Conversation.* https://theconversation.com/with-ai-translation-tools-so-powerful-what-is-the-point-of-learning-a-language-238068?trk=public_post_comment-text

Sparkes, Matthew. 2025. Should you still learn a second language if AI can translate for you? *NewScientist.* https://www.newscientist.com/article/2482190-should-you-still-learn-a-second-language-if-ai-can-translate-for-you/