



INTEGRATING SCIENCE, THOUGHT, AND TECHNOLOGY: TOWARD AN ARTIFICIAL INTELLIGENT ENVIRONMENT

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A Comparative Study of AI-Generated and Human-Produced English–Uzbek Online Translations

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Annotation. *This article examines the linguistic, stylistic, and creative differences between AI-generated and human-produced English–Uzbek online translations. By analysing parallel translation samples across news texts, conversational messages, academic content, and culturally loaded expressions, the study identifies key divergences in semantic accuracy, contextual sensitivity, creativity, and pragmatic appropriateness. The findings show that AI performs strongly in structural clarity and terminological consistency, while human translators excel in cultural nuance, creativity, and context-dependent interpretation. The study argues that effective translation practice increasingly demands a hybrid approach combining AI speed with human expertise.*

Keywords. *AI translation, human translation, English–Uzbek translation, creativity, pragmatics, machine translation, online communication, comparative linguistics.*

In recent years, the rapid development of artificial intelligence has dramatically transformed translation practices worldwide. English–Uzbek translation, which previously relied almost exclusively on human translators, is now increasingly supplemented and sometimes replaced by AI-based systems such as Google Translate, DeepL, ChatGPT and local machine-translation platforms. While AI excels in speed and accessibility, questions remain regarding its creativity, reliability, and pragmatic sensitivity.

This study aims to compare AI-generated and human-produced translations by examining their performance across different textual genres. The research focuses on semantic accuracy, structural choices, creativity, cultural appropriateness, and the ability to interpret contextual nuance areas that distinguish merely correct translations from communicatively successful ones.

[5]

Research on machine translation has expanded significantly since the emergence of neural networks. Scholars highlight AI's strengths in lexicon consistency, grammar, and large-scale corpus training. Yet studies also emphasize AI limitations, such as literalism, insufficient cultural understanding, and challenges in idiomatic interpretation. [1]

Human translators function not merely as linguistic intermediaries but as cultural and interpretive agents who negotiate meaning across social, historical, and pragmatic contexts. Their work involves far more than lexical substitution; it requires sensitivity to cultural references, communicative norms, and audience expectations. Creativity thus becomes essential when translating idioms, humor, figurative language, and other context-dependent expressions that lack direct equivalents in the target language. Through interpretive decision-making, translators adapt metaphors, reframe jokes, and reconstruct implicit meanings in ways that preserve both semantic content and pragmatic effect, demonstrating the inherently artistic dimension of translation practice.

Research on English–Uzbek translation emphasizes cultural asymmetry, pragmatic mismatch, and script differences (Latin–Cyrillic) as notable challenges. This study contributes to the literature by analysing creativity and pragmatics in depth.

The comparative study uses a qualitative and quantitative approach. Four textual categories were selected: news articles, academic texts, daily conversations, and culturally loaded expressions.

Forty English sentences were translated independently by AI translation systems and by experienced human translators. The resulting translations were assessed using a multidimensional evaluation framework encompassing semantic accuracy, contextual sensitivity, creativity, cultural appropriateness, and pragmatic naturalness. Expert evaluators rated each translation on a 5-point Likert scale and provided qualitative commentary to capture nuances not reflected in numerical scores, such as stylistic choices, interpretive depth, and handling of culturally embedded expressions. This mixed-methods approach enabled a detailed comparison of AI performance and human translation practices across both quantitative and qualitative dimensions. [3]

AI demonstrated high accuracy in factual and neutral texts. However, in idiomatic and culturally rich expressions, AI translations tended to be literal and lacked pragmatic naturalness. The evaluation revealed that human translators consistently outperformed AI systems in rendering figurative language, humor, and culturally embedded meanings. Whereas AI often struggled with idioms, metaphors, or contextually dependent expressions, human translators were able to interpret these elements with nuance and adapt them appropriately for Uzbek audiences. Their outputs displayed greater pragmatic naturalness, particularly in everyday conversational contexts where tone, register, and implied meaning are essential. As a result, human-produced translations sounded more fluid, culturally resonant, and stylistically authentic than their machine-generated counterparts. [2]

AI excels in speed and consistency, while human translators remain superior in creativity and cultural interpretation. The comparison suggests complementary strengths rather than direct competition.

The study concludes that while AI is highly effective for structural and informational translation tasks, human expertise remains indispensable for culturally and pragmatically complex content. A hybrid model combining AI efficiency with human creativity offers the most reliable approach for English-Uzbek online translation.

Both AI and human translators play crucial roles in the evolving translation landscape, and their collaboration is likely to define future translation practices.

References:

1. Bahdanau, D., Cho, K., & Bengio, Y. (2016). Neural machine translation by jointly learning to align and translate.
2. Castilho, S., Moorkens, J., Way, A., & Gaspari, F. (2018). Assessing quality in machine translation.
3. Koehn, P. (2020). Neural Machine Translation. Cambridge University Press.
4. Nida, E., & Taber, C. (1969). The Theory and Practice of Translation.
5. Qodirov, M. (2022). Ingliz va o'zbek tillari o'rtasidagi tarjima muammolari. Toshkent: Fan.
6. Vaswani, A. et al. (2017). Attention is all you need.