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THE ROLE OF CULTURAL EQUIVALENCE IN AI-ASSISTED ENGLISH– UZBEK TRANSLATION

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Abstract. *This paper examines the role of cultural equivalence in English–Uzbek translation carried out with the help of artificial intelligence (AI), focusing on idioms and culture-specific expressions. It shows where AI tools preserve meaning and cultural context and where they fail. The study argues that AI is most effective as a supporting tool within a human-centred workflow, because natural and accurate translation still requires linguistic competence and intercultural awareness.*

Keywords: *cultural equivalence, AI-assisted translation, machine translation, idioms, post-editing, intercultural communication.*

Annotatsiya. *Mazkur maqolada sun'iy intellekt (SI) yordamida amalga oshiriladigan ingliz–o'zbek tarjimasida madaniy ekvivalentlikning o'rni, xususan, idiomalar va madaniyatga xos ifodalarni tarjima qilish masalalari tahlil qilinadi. Tadqiqot SI vositalari mazmun va madaniy kontekstni qayerda saqlay olishini, qayerda esa xatoga yo'l qo'yishini ko'rsatadi. Tabiiy va aniq tarjima uchun SI inson nazorati ostidagi ish jarayonida yordamchi vosita sifatida qo'llanilishi, tarjimon esa til bilimi bilan birga madaniyatlararo kompetensiyaga ega bo'lishi lozimligi asoslanadi.*

Kalit so'zlar: *madaniy ekvivalentlik, sun'iy intellekt, mashina tarjimasi, idiomalar, postredaktura, madaniyatlararo muloqot.*

Аннотация. *В статье рассматривается роль культурной эквивалентности в англо-узбекском переводе, выполняемом с помощью искусственного интеллекта (ИИ), в частности перевод идиом и культурно обусловленных выражений. Показано, в чём инструменты ИИ сохраняют смысл и культурный контекст, а в чём допускают ошибки. Обосновывается, что ИИ наиболее эффективен как вспомогательный инструмент в рабочем процессе под контролем переводчика, поскольку естественный и точный перевод по-прежнему требует языковой компетенции и межкультурной осведомлённости.*

Ключевые слова: *культурная эквивалентность, перевод с помощью ИИ, машинный перевод, идиомы, постредактирование, межкультурная коммуникация.*

INTRODUCTION

Translation is one of the main instruments of intercultural communication, and its importance grows as Uzbekistan expands its educational, economic and digital ties with the English-speaking world. English and Uzbek, however, differ markedly in grammar, syntax,



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phraseology and social conventions, so many expressions cannot be translated literally without distorting their meaning. Idioms, proverbs, humour, forms of address and culture-bound references usually require adaptation rather than word-for-word transfer. For this reason, cultural equivalence has become one of the central concepts of modern translation studies.

The issue has acquired a new dimension with the spread of AI-based translation tools. Neural machine translation (Koehn, 2020), built on the Transformer architecture (Vaswani et al., 2017), and large language models can process large volumes of text within seconds and are now used daily by students, teachers and professional translators. Their speed and accessibility are undeniable, yet the cultural appropriateness of their output depends on the data and context they are given. This paper therefore aims to clarify the notion of cultural equivalence, to identify typical cultural problems in AI-assisted English–Uzbek translation, and to propose practical strategies for combining AI with human judgement.

Theoretical background

Cultural equivalence is the translator's ability to find target-language expressions that communicate the same meaning, emotional effect and communicative purpose as the original. The idea goes back to Nida's (1964) distinction between formal and dynamic equivalence, where the latter seeks to evoke in target readers a response comparable to that of source readers (Nida & Taber, 1969). Catford (1965) approached equivalence as the replacement of source-language textual material by equivalent target-language material, and Newmark (1988) distinguished semantic from communicative translation. Vinay and Darbelnet (1995) treated equivalence and adaptation as separate translation procedures, Baker (2018) examined equivalence at the levels of word, phrase, grammar, text and pragmatics, and Venuti (2018) highlighted the choice between domesticating and foreignizing strategies. Taken together, these views show that equivalence is not a mechanical match of words but an interpretive decision made within a cultural context (Pym, 2010).

Linguistic and cultural differences between English and Uzbek

English is a Germanic language of the Indo-European family with a Subject–Verb–Object order, whereas Uzbek is an agglutinative Turkic language that normally follows a Subject–Object–Verb order. Such differences force the translator to reorganise sentences instead of translating them word for word. Cultural differences are even more demanding. Idioms are fixed expressions whose meaning cannot be derived from their individual words. The English idiom “his heart is in the right place” does not refer to the position of an organ but to a person with good intentions or a kind nature. Uzbek conveys this idea through expressions such as *niyati xolis*, *niyati yaxshi* or *ko'ngli toza*, which preserve the meaning and effect of the original rather than its wording.

Other areas require similar decisions. English “you” has no equivalent of the Uzbek distinction between *sen* and *siz*, so the translator must infer the social relationship between speakers. English “uncle” and “aunt” must be specified in Uzbek as *amaki* or *tog'a* and *amma* or *xola*, depending on the side of the family. Culture-bound realia such as *hashar*, *dasturxon* or *Navro'z* in one direction, and Thanksgiving or Halloween in the other, call for

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explanation, borrowing or functional substitution. Table 1 illustrates the contrast between literal and culturally equivalent renderings.

Table 1. Literal and culturally equivalent renderings of English idioms

English expression	Typical literal rendering	Culturally equivalent Uzbek
<i>His heart is in the right place</i>	<i>Uning yuragi to'g'ri joyda</i>	<i>Niyati yaxshi; ko'ngli toza</i>
<i>It is raining cats and dogs</i>	<i>Mushuklar va itlar yog'moqda</i>	<i>Yomg'ir chelaklab quyayapti</i>
<i>Once in a blue moon</i>	<i>Ko'k oyda bir marta</i>	<i>Oyda-yilda bir</i>
<i>Break a leg!</i>	<i>Oyog'ingni sindir!</i>	<i>Omadning kelsin!</i>

Cultural equivalence and AI-assisted translation

AI tools offer real benefits: they produce fast first drafts, suggest alternative wordings, explain the meaning of an idiom and help maintain terminology. When the prompt specifies the audience, genre and register, the results often improve noticeably. Nevertheless, several recurrent problems can be observed. First, systems tend towards literalism, especially with rare idioms and with Uzbek, which is represented by far less data than English. Second, they often handle politeness and register inconsistently, switching between *sen* and *siz* within one text. Third, kinship terms and realia are frequently flattened: *dasturxon* may become simply “tablecloth”, losing its association with hospitality. Finally, AI output is usually fluent, and this fluency can hide cultural errors from readers and novice translators who do not check the result against the source.

Practical strategies

For idioms, Baker (2018) suggests using an idiom of similar meaning and form, an idiom of similar meaning but different form, paraphrase, or omission. These choices require judgement about context and purpose, which AI cannot yet make reliably on its own. The following workflow is therefore proposed:

- 1) Pre-editing: mark idioms, realia, forms of address and kinship terms in the source text.
- 2) Contextual prompting: state the audience, register and purpose, and ask the system for several options with explanations.
- 3) Critical post-editing: check each option against dictionaries, corpora and native-speaker usage, and choose between domestication and foreignization according to the purpose of the translation.
- 4) Consistency control: keep glossaries of realia, kinship terms and address forms for the whole text.
- 5) Training: include comparison of AI output with human translations in translator education to develop critical evaluation skills.

CONCLUSION

Cultural equivalence remains one of the foundations of high-quality English–Uzbek translation, and the spread of AI has made it more, not less, important. AI can accelerate

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routine work and support translators, but culturally sensitive translation still depends on language proficiency, cultural knowledge, critical thinking and professional judgement. Future research should test the proposed workflow on larger bodies of English–Uzbek material and integrate AI tools with intercultural translation strategies.

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