OVERCOMING LINGUISTIC CHALLENGES IN UZBEK – ENGLISH AI TRANSLATION: A STUDY OF FILM REVIEW DISCOURSE

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ABSTRACT

This study was prompted by a simple question about the best tools for translation for an English lesson on films for pre-intermediate Uzbek learners. Based on this enquiry this paper explores difficulties faced in Uzbek-to- English translation specifically within the framework of film review discourse. It explores translation generated across four tools. Two from Neural Machine Translation (NMT) Google Translate, Yandex Translate and two from Large Language Models (LLMs) ChatGPT and Gemini. Reviews of six Uzbek films from authentic sources were analyzed and based on the expert input from an Uzbek language specialist this study identified failure types in terms of use of idioms, cultural terminology, register maintenance and overall cohesion. The paper concludes with a recommendation based on multi-layered intervention approach that integrate Skopos - based human editing and glossaries with human interventions to facilitate translation accuracy, especially for low resource languages.

Keywords: Uzbek - English translation, AI translation tools, film review discourse, low resource languages. NMT, LLM, Skopos theory, Google translate, Yandex translate, ChatGPT, Gemini.

INTRODUCTION

The introduction of artificial intelligence into translation has revolutionized translation enabling multilingual content far more accessible than it was in the 1980s. The field of NLP (natural language processing) has undergone a tremendous change since introduced in the 1980s thereby shifting its parameters from statical methods towards 'deep learning' which utilizes artificial neural networks with billions of trainable parameters. However, for languages such an Uzbek with approximately 35 million speakers the digital training data is limited and continue display systematic and consequential shortcomings (Jumashukurov, 2024) unlike high resource languages that benefit from high datasets. Research had documented (Joshi et al., 2020) the inequalities that exist in the global NLP.

The evolution of NMT (Neural Machine Translation), is dramatically accelerating the evolution of LLMs (Large Language Models) in terms of AI integration into translation practice. This study originated as a result of a practical pedagogical question while preparing a lesson plan based on films for grade ten in Uzbekistan. The decision to use translation tools in the educational setting has its values and limitations (Ayyaz, 2025; Huang, 2020). Therefore, it was essential to identify the best suited tool for translation be it NMT or LLM. What began a classroom lesson plan task

revealed a complex issue which extended beyond classroom level language learning. It reveled complex errors that extended beyond word errors as it involved pragmatics and cultural issues (Andrade Preciado et al.,2025; Berman, 1985; Feng, 2025; Haixia and Xuan, 2025 and Venuti, 1995). Outputs from the translation tools as categorized below were considered for the study.

1. Neural Machine Translation (NMT)– Google translate and Yandex
2. Translate and Large Language Models (LLMs) – ChatGPT and Gemini

The study is based across a corpus of six Uzbek film reviews which revealed that AI tools distorted the original meaning of the Uzbek texts in a distinct manner in comparison to a human translators' errors. Hence the paper objectives are:

1. Classify linguistic failures in Uzbek to English translation
2. Asses the tools failure in terms of cultural and intuitional terminology
3. Propose an intervention framework based on Skopos -informed human post-editing.

The study adds to the expanding research on low resourced languages in NMTs and LLMs (Zhong et al., 2025; Court and Elsner, 2024) and address the need for context-based evaluation in translation technology.

METHODOLOGY

Corpus and Data Collection

Six authentic Uzbek film reviews were sourced from online film criticism platforms with repute. The selected films represent a wide range of sub-genres in terms of war drama, biographical documentary, philosophical criticism, sports documentary, art cinema and musical biography. This diverse selection was made to avoid and bias toward any particular film genres maximizing the analytical scope (Ramzan et al., 2025). The select film reviews were translated using the selected NMT and LLM tools : Google translate, Yandex Translate, ChatGPT and Gemini. The output generated were collected without any modifications or iterative prompting to ensure the prevalence of standard conditions across all tools (Park, 2022; Pucinskaite and Mitkov, 2025).

Analytical Framework

The analytical framework for the study of AI (NMT and LLMs) generated translations of film reviews is multi-dimensional as it comprises of : Systematic functional linguistics (SFL), Translation theory (Sergeyevna, 2025) , linguistic and cultural translations across diverse fields (Goddard, 2020 ; Schleppergrell, 2007). The frame employs 'Skopos Theory', for the reviewer to evaluate the output of the AI tools. This engagement of an Uzbek expert in evaluation of an AI generated output is essential to establish the methodical challenge AI tools pose with a tendency to deform the Uzbek texts due to the absence of robust automated benchmarks for the language.

Expert Validation

The study employed a dual validation process. A native Uzbek language specialist reviewed each generated translation and provided critical conformation of the underlying discrepancies based on the grounds of pragmatic and cultural judgements (Jumashukurov, 2024; Nekoto et al. 2020). And an English and AI specialist engaged in systematically analyzing the coherence and cohesion discrepancies in the AI output.

This dual approach is essential to ensure that political and culturally sensitive terms are analyzed with a sociolinguistic depth and identify the gap in terminology.

RESULTS

Systematic Classification of Key Challenges : Uzbek to English Film Review Translations.

Analysis of the Uzbek movie reviews translated to English with the four computational translation tools (NMT and LLMs) revealed consistent failures as presented in Table 1 below.

Table 1: Systematic Classification of Key Challenges

S.No	Failure Category	Google Translate	Yandex Translate	Gemini	ChatGPT	Impact on Review
1.	Idiomatic and proverbial	Translation is literal. This contributes to the destruction of the intended meaning idioms or proverbs convey. **Example:** "Qarg'alar uchsa qaraylik" becomes awkward because of the literal translation: Let's see if the crows fly. It destroys the title meaning.	Demonstrated a failure caused by literal translation. **Example:** "Qarg'alar uchsa qaraylik" translates to: Let's look when crows fly is rendered without the force the film-title is required to convey.	Captured the intent with minor lapses. **Example:** "Qarg'alar uchsa qaraylik" kept closer to original rhetorical feel as it translates to : When the Crows Fly, Let's Look.	Preserved the rhetorical impact required. **Example:** "Qarg'alar uchsa qaraylik" rendered idiomatically as the translation renders "When the Crows Fly, Let's Look.	Film reviews rely on idiomatic expressions and proverbs a literal translation affects the literary and emotional weight that the Uzbek review presents. Loss turns literary criticism into flat prose.
2.	Lexical failure due to low Uzbek resource	Generated response retained very high level of Uzbek words. Example: " syujet arkasi, tanishtirilsa, qutqarolmaydi, ekspozitsiya qisqaligi, etc.., which	The model too retained same Uzbek words as Google Translate. The words invented were hero death, exposition shortness, character arc.	The retention of Uzbek words was minimal. Example: "syujet arkasi and ekspozitsiya qisqaligi". While it invented words like plot arc.	This model was efficient comparatively as most Uzbek terms were translated. While the invented word mirrored ChatGPT.	Indicated that literary film review vocabulary with specialized criticism terms that parallel Uzbek language is extremely low. Hence the Machine translation systems retain original words or invent

		were copied by the model as it was. The model further invented (hallucinated) meaningless compound words in the process of translation. Example: plot ark, exposition shortness, hero death scene.				meaningless terms resulting in a lexical failure. It is essential to note that these words belong to a distinctive literary register.
3.	Gaps in Cultural and Institutional terminology	Historical references nullified. Example: Zulfiya Zokirova, Basmachi, and others – Bukhara officer uniform - compromises the patriotic tone.	Distorts the references used. Example: Sen yetim emassan – the poem/ film loses world war IIs collective memory.	Mostly retains the information during translation.	Preserves the historical sensitivity during translation.	Gaps in translation that relate to national and historical literary memory should not be lost during translation.
4.	Register and Discourse	Consistent literal translation, with journalistic register, with no attempt to adjust the discourse output which is stylistically flat. Example: “Ilhaq” begins with a fragmented literal	The output is similar to Google Translate – literal translation and neutral tone. Example: “Farida” comfort - zone metaphor is condensed and represented in a dry manner devoid of originality.	Utilizes occasional preamble or paraphrasing in order to improve the readability. However, it retains the overall register, which at times result in a neutral and less emotional output.	Paraphrasing is noticeable. Though it produces a natural preamble, with a fine discourse it tends to condense and minimize the original emotional intensity and rhetorical elaboration which may	Reviews in Uzbek utilizes a sophisticated register which integrates – literary criticism, emotional vocabulary and a discourse rich in history. The responses generated during translation minimize stylistics resulting in a flat prose devoid of rhetorical and

		rendering of the ‘ Title and opening sentence’ without any introductor y framing.			be concise but loses out on retaining the literary Uzbek register.	emotional richness. This again may be a result of low resources in the literary domain.

DISCUSSION

The analyzed data across the select NMT and LLM models confirm that the existing AI tools are not equipped to handle Uzbek film review discourse effectively. The documented failures reveal a predictable pattern around : idioms, cultural and institutional terminology, register, tone and cohesion which result from low resources (Court and Elsner, 2024) of the Uzbek language. As Pang et al(2025) argued, revisiting translation challenges through AI once again reveals the long-standing problems in translation, despite the advancement in AI. Hence, this study proposes a multi-tiered intervention framework based on Skopos theory (Abiyatova, 2025; Ramzan et al., 2025) as it serves as the primary foreground for quality in translation.

Literal Translation Trap and Qualitative Improvement:

The results evidently demonstrate a divide between NMT and LLMs. Google and Yandex failed in terms of literal translation. In instances where “Qarg‘alar uchsa qaraylik” is translated to, “Let’s see if the crows fly”. This is “ Negative Analytic” according to Berman as it represents the destruction of proverbs and idioms as the machine ignores it during translation. Though the LLMs like ChatGPT and Gemini capture the intent of the review it fails to represent the original emotional intensity.

Low Language Resources

A critical reason revealed by analyzing the DATA was the low frequency of Uzbek literary vocabulary. This resulted in the models generating “Zero-Translation” or inventing terms referred to as, “Hallucination”. This requires domain specific glossary to be developed and integrated into the translation workflows.

It is evident from the study that the tools selected for translation from Uzbek to English, are incapable of generating justifiable outputs. Hence it is essential to practice MTPE (Machine translation Post-Editing), as guided by the Skopos theory as the quality of translation must be judged by its communicative purpose.

CONCLUSION

In conclusion the study had demonstrated that the Neural Machine translation (NMTs) and Large Language Models (LLMs), fail when applied to Uzbek – English translation specifically film reviews due to low resource (Joshi et al.,2025). To address the limitations a muti-tiered intervention framework comprising of literary, cultural, historical and national glossaries, discourse level evaluations grounded in Skopos theory (Abiyatova, 2025, Ramzan et al., 2025) were proposed. The systematic application of Machine Translation Post- Editing (MTPE) forms the core of this framework as it engages human editors to refine the generated translation. Moreover, the study recommends the development of domain-specific glossaries. Hence, future research could focus on building a corpus to facilitate quality in translation especially when the language is under-resourced.

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