

PAPER

MACHINE TRANSLATION VS HUMAN TRANSLATION: COMPARATIVE PERSPECTIVE

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Abstract

With an emphasis on literary writings specifically, this article compares and contrasts machine translation with human translation. The speed and convenience of machine translation have led to its widespread application in the rapidly developing field of artificial intelligence. Its accuracy in expressing content, style, and cultural context is still up for debate, though. By analyzing a few selected passages from Abdulla Qodiriy's Uzbek novel "O'tkan kunlar" and Mark Reese's English translation of the same book, this study seeks to evaluate and contrast the quality of machine and human translations. Accuracy, fluency, and cultural equivalency are among the evaluation criteria utilized in this qualitative comparison methodology. The results demonstrate that although machine translation works well for general comprehension, stylistic subtleties and cultural depth are frequently lost. The results demonstrate that although machine translation works well for general comprehension, it frequently misses the cultural depth and stylistic subtleties of literary works. Human translation, on the other hand, exhibits higher interpretive precision and cultural awareness. According to the study, in contemporary translation practice, machine and human translation should be seen as complimentary strategies rather than rival techniques.

Key words: automate translation, human translation, artificial intelligence, culture, equivalency, pragmatic meaning, semantic accuracy, stylistic accuracy

Introduction

Early attempts to automate translation using mechanical and dictionary-based systems marked

the beginning of the development of machine translation in the early 20th century. The Georgetown-IBM experiment in 1954 marked

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a critical turning point in machine translation research by proving that translating using sentence counting criteria was feasible. However, the efficacy of early rule-based systems declined because of their poor capacity to manage contextual meaning and semantic ambiguity. In the late 20th century, machine translation had a resurgence due to the development of digital technology, and in 2014, neural machine translation was introduced, ushering in a new era. When compared to earlier methods, neural models have greatly increased contextual accuracy and fluency. Notwithstanding these technological developments, machine translation still has trouble capturing pragmatic, stylistic, and cultural quirks, especially in literary writings. These drawbacks serve as a foundation for contrasting machine versus human approaches to translation quality and emphasize the ongoing significance of human translation.

Artificial intelligence advancements and the increasing demand for multilingual digital communication have led to a rapid expansion of machine translation systems. They provide speed and efficiency for a variety of translation tasks and are extensively utilized in localization, business, and online content production. To boost efficiency, a lot of language experts and translators include machine translation into their computer-assisted translation processes.

Even while AI-based models have improved fluency, machine translation still has issues with accuracy, style, and cultural nuances. These difficulties encourage the employment of hybrid techniques to human-machine translation while highlighting the ongoing significance of human translators. Since accurate translations maintain the author's voice, cultural nuance, and emotional meaning, they are essential to literary works. Literary works depend on style, tone, symbolism, and rhythm in addition to literal meaning, all of which influence the reader's interpretation. A bad translation might change the intended emotional impact, hinder character development, or distort ideas. Idioms, dialects, and cultural allusions are examples of sociolinguistic and cultural factors that must be taken into consideration while translating literature. A loss of authenticity and a distortion of the cultural context may result from an inaccurate

portrayal of these characteristics.

Readers could thereby get disengaged from the text's original meaning. Translators frequently put contextual and functional equivalency ahead of literal translation in order to obtain accuracy. This technique emphasizes the critical role that human translators play in maintaining meaning and nuance in literary translation by requiring linguistic proficiency, cultural understanding, and interpretive abilities. Even while machine translation has become much faster and more fluid due to recent advancements in artificial intelligence, its basic constraints in meaning formation remain. Instead of relying on true semantic or cultural understanding, machine translation systems mostly use probabilistic pattern recognition. Because of this, the machine-generated output may misinterpret the author's intent or diminish the depth of interpretation when applied to complex materials, particularly literary masterpieces. In contrast to earlier technological constraints, contextual thinking is the current difficulty rather than grammatical precision. Uncertainty, pragmatic meaning, and culturally entrenched idioms are frequently not resolved by machine translation.

Translations that are grammatically and culturally correct but lack stylistic diversity, emotional intensity, and sociolinguistic indications are frequently neutralized. These problems are becoming more noticeable in narrative and long-form texts that must preserve voice and consistency throughout. Consequently, machine translation is insufficient as a stand-alone solution for literary translation, even though it is widely used and effective. Its drawbacks highlight the necessity of using human translators, whose interpretive abilities and cultural sensitivity enable them to maintain the style, meaning, and emotional impact of translated literature. Literature review. The term machine translation (MT) describes the process of mechanically translating text between languages using computer systems without the need for human participation. When early rule-based systems depended on bilingual dictionaries and manually coded grammatical rules in the middle of the 20th century, the concept of automating translation first surfaced. These algorithms,

however, have trouble recognizing contextual meaning, word order discrepancies, and ambiguity. With the advent of statistical and later neural techniques, a significant change took place.

According to Koehn (2010), statistical machine translation (SMT) does not use deep semantic analysis; instead, it finds probability patterns in huge bilingual corpora. Although SMT increased fluency and scalability, it was still unable to handle idiomatic and culturally particular expressions. Neural machine translation (NMT), which uses deep learning models and artificial intelligence, has recently revolutionized the discipline. Vaswani et al. (2017) claim that attention-based mechanisms in brain systems analyze whole phrases, resulting in enhanced fluency and contextual coherence. NMT still lacks full semantic comprehension and cultural awareness, despite the fact that it greatly increases grammatical accuracy and naturalness. As a result, machine translation is still unable to fully capture complex and culturally rooted meanings, even with advancements in technology. Because human translation entails cognitive interpretation, cultural mediation, and creative decision-making, it differs fundamentally from machine translation.

In literary translation, the translator recreates tone, rhythm, symbolism, and emotional resonance in addition to lexical meaning. Shomurodova (2022) examined the distinctions between machine and human translation of scholarly works in Uzbek and found that human translators exhibit higher levels of stylistic coherence and semantic accuracy. Her research demonstrates that although machine translation produces results more quickly, it frequently falls short in terms of contextual clarity and terminological consistency. Conversely, human translators maintain the author's objective and offer logical flow. Similar to this, Mahamatkulova (2023) stressed the significance of interpretive adaptation in her analysis of both human and machine translations of culturally sensitive materials. Her study demonstrates that functional equivalency, as opposed to literal translation, is necessary for idioms, proverbs, and culturally distinctive terms. Her research indicates that human translators employ pragmatic thinking and cultural understanding to preserve authenticity, whereas computer systems frequently generate

literal translations that misrepresent meaning. Literary translation is therefore especially reliant on the translator's inventiveness, interpretive abilities, and cultural awareness - qualities that are challenging to automate.

Prior comparison analyses have reliably outlined MT and HT's advantages and disadvantages. According to Koehn (2010), MT systems are quick and economical when used to repetitious and technical texts. Sentence-level coherence and fluency are further enhanced by neural systems. They are nonetheless constrained in their ability to express metaphorical language and resolve ambiguity, though. Similar findings are confirmed by Uzbek researchers. According to Shomurodova (2022), MT is unreliable for materials with complicated stylistics but helpful for informational texts and draft production. According to Mahamatkulova (2023), machine translation frequently neutralizes emotional tone and stylistic variation in literary contexts.

Studies conducted in Uzbekistan and other countries generally conclude that human translation offers stylistic accuracy, cultural adaptation, and semantic depth, while machine translation is more productive and convenient. There are still few systematic comparative assessments that concentrate on Uzbek literary works, despite the fact that several research have contrasted machine and human translation in technical and academic materials. The majority of research concentrate on linguistic processing or the general quality of translation, but they don't go into great detail about how machine translation utilizes the classical Uzbek literature's rich cultural heritage and intricate stylistic elements. As a result, a thorough comparison of human and machine translation in the context of Uzbek literary writings is required. Deeper understanding of how the author's voice, cultural allusions, and emotional subtleties are maintained or distorted in translation techniques can be gained by studying works like classic Uzbek novels.

Methodology

A qualitative comparative research design is employed in this study. Because it emphasizes in-depth text analysis above statistical metrics,

the study is qualitative. Because it methodically contrasts machine translation (MT) and human translation (HT) findings to find variations in meaning, style, and cultural representation, it is comparative in nature. The main objective is to evaluate how well each translation technique captures authorial voice, cultural quirks, and semantic meaning rather than to quantify numerical correctness.

As a result, the best approach for analyzing literary texts is qualitative analysis. The study's data comes from Abdulla Qodiriy's classic Uzbek novel "Bygone Days." This piece was chosen because it is appropriate for evaluating the quality of translation due to its rich cultural allusions, historical background, and stylistic intricacy. *Bygone Days*, which Mark Reese translated into English, serves as a human translation for comparison. The original Uzbek language has been expertly literaryized in this published translation. Additionally, a neural machine translation system was used to translate a few chosen passages from the original Uzbek text into English, resulting in a machine translation product. The human-translated text is compared to the MT version.

The following standards were used to choose representative historical excerpts:

1. Existence of expressions that are culturally distinctive
2. Idiomatic language use
3. Richly stylistic or emotionally evocative excerpts
4. Conversations that use sociolinguistic elements

A machine translation technology was used to translate each chosen passage from the original Uzbek language into English. After then, the published human translation, the machine translation output, and the source text were all aligned for methodical comparison. In order to detect lexical, structural, and semantic variations, the matching procedure made sure that comparable sections from each version were examined side by side. Four primary criteria served as the foundation for the analysis: lexical-stylistic consistency, correctness, fluency, and cultural and pragmatic equivalency. Whereas fluency concentrated on English grammatical correctness and naturalness,

accuracy evaluated how well the original message was communicated. Idioms, historical allusions, and socially created meanings were evaluated for transferability using cultural and pragmatic equivalency. Lastly, the degree to which the author's tone, voice, and expressive style were retained in the translation was evaluated, along with lexical and stylistic consistency. When taken as a whole, these standards made it possible to compare machine and human translations in a literary setting.

Result

The findings of a qualitative comparison between a few chosen passages from "Bygone Days" and their human-translated English translations, as well as the outcomes of neural machine translation, are shown in this section. Four criteria are the focus of the analysis: lexical-stylistic compatibility, cultural-pragmatic equivalency, fluency, and semantic accuracy. The findings indicate that while human translation more successfully maintains pragmatic force, cultural nuance, and narrative voice, machine translation typically performs better in terms of structural and literal accuracy. Sometimes, nevertheless, human translation adds interpretations that go beyond the original text.

Table 1

"Bygone days"	Machine translate
<p><i>Otabek uyaluv aralash kulimsirab qutidor'ga qaradi: - Taassuflki, eslay olmayman, - dedi. Qutidor tag'in umanidir aytmoqchi bo'lg'an edi, Akram hoji unga yo'l bermadi. - Hoji akamiz bu kunda qanday ish bilan mashg'ullar? Otabek: - Toshkand begi yonida mushovir sifati bilan turadilar. - Azizbek bu kunda ham Toshkandga hokimdir? - Shunday: - Sotqi bek ketkin, Aziz bachcha deng, - dedi Homid va Akram hojiga qarab kuldi.</i></p>	<p>Otabek, smiling with a touch of shyness, glanced at Qutidor. "Unfortunately, I cannot recall," he said. Qutidor was about to add something more, but Akram Hajji cut him off, asking, "Your father, Hajji Akamiz, what work is he doing these days?" Otabek said, "He is the adviser to the <u>bek</u> of Tashkent." "Azizbek is still the mayor of Tashkent these days?" "Yes, he is." "Betrayer Bek, be gone! Aziz the Bacha!" scoff Hamid, whose broad grin, aimed at Akram Hajji, seemed to insinuate some sordid knowledge.</p>

Subtle irony and sociopolitical connotations can be found in the original text of the first speech fragment. By translating sentences like "Let the traitor bek go" as "Bek, bek, go!" the human translator heightens the emotional impact. This decision strengthens the tone of accusation.

Additionally, the statement "it seemed to convey some disgusting knowledge" presents a narrative interpretation that is not made clear in the original text. The machine translation, on the other hand, produces a version that is systematically accurate and grammatically correct. But by translating the sentence more impartially, it lessens the satirical impact ("Let the traitor bek go aside – say young Aziz instead"). The pragmatic intensity is lessened, but the meaning is still evident. Therefore, in this instance, the machine translation places more emphasis on methodical precision, whereas the human translation better captures the social nuances.

Table 2

"O'lganimdan keyin ruhimga bir kalima qur'on o'qusa, bir vaqtlar Hasan Ali ota ham bor edi deb yodlasa, menga shumisi- kifoya"-deb qaror bergan va hozirdan boshlab Otabekka bu to'g'rida siporishlar berib, undan samimiy va dalar olib yurg'uchi oq ko'ngil bir qul edi.

"Bygone days"	Machine translate
"After my death, if Otabek recites the Quran on behalf of my soul, commemorating the fact that at one time there lived a man named Hasan Ali Ota, that would be all I need to rest my bones in peace." It could be said of him that he was an Oq Kungli Odam who humbly beseeched Otabek to fulfill his final wishes and in turn received assurances that they would be fulfilled.	"After I die, if someone would recite but a single verse of the Qur'an for my soul and remember that once there was a Hasan Ali ota, that alone would suffice for me," he had resolved. From that time on, he would entrust Otabek with this wish, seeking from him sincere promises. He was a pure-hearted, humble servant.

Both theological and emotional humility are expressed in the second passage. The sentence's simplicity - "That alone would suffice for me" is preserved in the machine translation, which is closer to the original meaning. Without introducing more levels of interpretation, it expresses the speaker's desire quite plainly. But the human translation includes the line "rest my bones in peace," which broadens the original language while adding poetic resonance. This deviates slightly from pure semantic equivalency, yet it still supports

the literary tone. In this instance, the human translation places more emphasis on expressive richness, whilst the machine translation shows more adherence to the original meaning.

Table 3

Begin, garchi achchig'lansangiz ham avtishka majburman: sizda vijdon, insof, rahm, va'da, vafo, yaxshiliqni bilish, boringchi, odamgarchilikdan hech gap yo'q emish. Bil'aks siz: hivlakor bir tulki, og'zi qon bir bo'ri, rahmsiz bir jallod, avyatsiz bir vigit!

"Bygone days"	Machine translate
My dear Bek, though you may become angry, I still insist on saying: You have no conscience, no pity, no honor towards your promises, no gratitude, and quite simply you are devoid of anything good, devoid even of humanity. On the contrary, you are a sly fox, a bloody-mouthed wolf, a merciless assassin, a shameless young man!	My lady, though you may take offense, I am bound to speak the truth: they say there is in you neither conscience nor fairness, neither mercy nor loyalty, neither gratitude for kindness nor even the faintest trace of humanity. On the contrary, they call you a cunning fox, a blood-mouthed wolf, a merciless executioner, a shameless young man!

The third passage involves emotive metaphors and straightforward charges. The figurative imagery ("fox, wolf," and "executer") is preserved in both languages. However, the term "they say" is included by the machine translation, weakening the original text's direct opposition. This subtle shift reduces the rhetorical intensity. The original structure's forceful repetition and harsher accusing tone are preserved in the human translation. As a result, even if both translations are linguistically accurate, the human translation more successfully captures the pragmatic and emotional impact.

Table 4

O'tkan kun Chuqur qishloqqa tushkan edi. Asr vaqtlarida qaytib guzarga keldida, xayolat bilan Hasanali do'koniga o'turdi. Otlig, yayov o'tkinchilar to'rt tomonga qatnab turardilar, uning bu kungi kavfi o'tacharoq ketkan bo'lsa kerak, ularning g'ira-shira ko'zga ilgandek qaraydi.

"Bygone days"	Machine translate
One day he departed from Chukar Kishlok, entering the guzar sometime late in the afternoon, heady in a drunken stupor and sitting down in Hasan Ali's stall. He barely registered the horsemen passing the stall from the all directions, so sunk was he in the depths of inebriation, eyelids barely able to raise themselves.	The day before, he had gone down to the village of Chuqur. Toward late afternoon, he returned to the bazaar crossing and, lost in thought, sat down in Hasanali's shop. Horsemen and pedestrians passed back and forth in all four directions. It seemed that his mood that day was somewhat unsettled, for he looked at them as though seeing them only dimly, through a haze.

A notable distinction may be seen in the fourth excerpt. Reflective mood and blurry perception are described in the original text. Semantic accuracy and narrative consistency are preserved as the machine translation correctly depicts this as "lost in thought" and "seeing them only dimly." However, the human translation adds references to intoxication and "drunken stupor," which aren't mentioned in the original text. Characterization and emotional atmosphere are changed by this interpretive contribution. Despite being visually striking, it deviates from the original intent. In this case, human translation exhibits imaginative but exaggerated interpretation, whereas machine translation shows more semantic correctness.

Table 5

"O'tkan kunlar"	
<p><i>Kumushning oy-kuni yaqin edi. Nabiralik bo'ladirgan O'zbek oyimning ishi boshidan oshaqan, Kumushning ovi tug'masdanaq ul beshik vasatish bilan mashg'ul edi. Dovachi kim, aqiqaga nechta qo'y kerak, nechanchi kunda to'y o'kaziladir, nechta erkak, nechta xotin avtiladir va kimlar?</i></p>	
"Bygone days"	Machine translate
<p>Kumush's delivery date neared. Though a month remained to build a <u>beshik</u> for the baby, Uzbek <u>Oyim</u> thrilled to see a grandchild on the horizon, engaged in <u>busybodying</u> about, loudly barking orders. Questions of who the midwife should be, how many sheep should be slaughtered for the baby shower, on what date the baby's future marriage would take place, how many men and women should be invited and who should not? - Uzbek <u>Oyim's</u> mind was preoccupied with these sorts of sundry issues.</p>	<p>Kumush was nearing her time. Uzbek <u>Oyim</u>, who was soon to become a grandmother, was overwhelmed with preparations. Even before Kumush had given birth, she was already busy having a cradle made. Who would serve as the midwife? How many sheep would be needed for the <u>aqiqah</u>? On which day would the celebration be held? How many men and how many women would be invited—and who exactly would they be?</p>

The customs and cultural practices surrounding birthing are the subject of the fifth paragraph. Both structural clarity and cultural allusions like "aqiqah" are preserved in the machine translation. The preparations list structure is explained in detail. Evaluative terms like "busybodying" and "barking orders," which add personality and comedy but are not explicitly stated in the original, are introduced in the human translation. Furthermore, rather than literal transfer, certain expansions imply interpretive enhancement. Therefore, human translation enhances narrative voice at the expense

of strict equivalency, whereas machine translation is more structurally faithful.

Table 6

"O'tkan kunlar"	"Bygone days"	Machine translate
<u>so'yinchi</u>	<u>soyunchi</u>	<u>So'yinchi</u>
<u>beshik</u>	<u>beshik</u>	cradle
<u>chochpopuk</u>	<u>sochpopuk</u>	corn pop
<u>Ko'rmana</u>	<u>kormana</u>	a <u>newborn gift</u>
<u>barakalla</u>	<u>barakalar</u>	Well-done
<u>posha kelin</u>	<u>pasha kilin</u>	a <u>delicate bride</u>
<u>dasturxon</u>	<u>dasturkhon</u>	<u>tablecloth</u>
<u>tandir</u>	<u>tandir</u>	<u>Tandoor or clay oven</u>
<u>qimiz</u>	<u>qimiz</u>	Kumis or fermented mare's milk
<u>kayf</u>	<u>kaif</u>	mood

Consistent trends are found when ten culturally specific vocabulary elements are compared. By transliterating original terminology (such as beshik, dasturkhon, tandir, and qimiz), human translation typically preserves cultural authenticity. Although this tactic strengthens cultural identity, it could need to be interpreted by the reader. Such terms are sometimes replaced with broad English counterparts (e.g., cradle, tablecloth, mood) in machine translation. This lessens cultural distinctiveness while increasing accessibility and clarity for the intended audience. Machine translation has limits when it comes to processing low-frequency, culturally specific terminology, as evidenced by one instance when it clearly creates a lexical error (chochpopuk = corn pop).

According to the analysis, machine translation effectively maintains literal meaning, grammatical fluency, and structural accuracy. But it frequently overpowers cultural subtlety and pragmatic intensity. The narrative voice, emotional impact, and cultural richness are better preserved with human translation, on the other hand. But sometimes it adds explanations that change the semantic accuracy. These results imply that literary translation necessitates human interpretive abilities to maintain stylistic depth and cultural meaning, although machine translation is helpful for rendering and general comprehension at the draft level.

Discussion

By analyzing specific passages and lexical items, the current study sought to compare machine translation (MT) and human translation (HT) within the framework of *O'tkan kunlar*, a culturally rich Uzbek literary book. The qualitative analysis's conclusions both support and expand upon earlier studies included in the literature review. The MT results in this investigation showed great structural fluency and surface-level correctness, which is consistent with Kohn's (2010) claim that machine translation depends on probabilistic pattern recognition rather than deep semantic understanding. The machine translation more consistently preserved the original meaning than the human translation in a number of paragraphs, especially Table 2 and 4. For instance, in Excerpt 4, the human translation added the concept of a "drunken stupor," which drastically changed the characterization, whereas the MT maintained the original text's contemplative and muted tone. This lends credence to the idea that human translators can provide interpretive expansions beyond strict semantic equivalency, even though they are also capable of creative mediation. The findings, however, also align well with Bar-Hillel's (1960) worries over machine systems' incapacity to deal with ambiguity and pragmatic complexity. Sarcastic tones and emotional intensity were reduced via machine translation in Table 1 and 3. Protective expressions like "they say" drastically changed how people interacted with one another and lessened the impact of rhetoric. While neural machine translation enhances fluency, these examples demonstrate that it is deficient in pragmatic sensitivity and contextual inference, two critical components of literary speech.

Mahamatkulova's (2023) remark that idiomatic language and culturally distinctive expressions continue to be a barrier for automated systems is supported by lexical analysis. In order to increase accessibility and decrease cultural specificity, machine translation frequently generalized culturally particular terminology in this study (for example, *beshik* was translated as "beshik," and *dosturxon* as "dasturxon"). More importantly, the incorrect translation of *chochpopuk* as "corn pop" shows how MT can produce semantic

distortion by relying on surface-level lexical similarity rather than contextual meaning. These mistakes demonstrate how MT is susceptible to low-frequency or culturally embedded terminology. Nevertheless, the results also imply that human translation is not impervious to constraints.

HT occasionally included evaluative or expressive elements that were not apparent in the original text, even while it more successfully maintained cultural context through transliteration techniques (such as *kimiz*, *tandir*, and *dostyrkhan*). For instance, in Table 5, terms like "busy" and "barking orders" gave an interpretive tone. This implies that integrity and readability must be balanced in literary human translation, which frequently puts narrative interest ahead of exact literal accuracy. Crucially, these findings back up O'Brien's (2002) contention that human and machine translation ought to be seen as complimentary rather than antagonistic systems. According to the investigation, MT performs exceptionally well in descriptive passages due to its word-for-word semantic transfer, grammatical fluidity, and structural clarity. HT is still better in expressing cultural depth, pragmatic strength, and emotional resonance, nevertheless.

For literary translation assignments, hybrid human-machine workflows may offer the most balanced approach due to the conflict between stylistic mediation and semantic accuracy. Additionally, by using comparative analysis to ancient Uzbek literary texts rather than technical or academic resources, which have been the subject of other studies, this study expands on previous research. The results imply that MT's shortcomings are more noticeable in culturally rich narrative contexts, especially when it comes to dialogue, metaphor, and sociolinguistic subtleties. Therefore, even if neural machine translation is a significant technological advancement, it cannot take the position of human translators' interpretive skills in literary fields. Conclusion. In the framework of the culturally significant Uzbek literary work "Days Past," this study attempts to compare the efficacy of machine translation (MT) and human translation (HT).

The study evaluated translation efficacy based on semantic accuracy, fluency, cultural-pragmatic

equivalency, and lexical-stylistic coherence through qualitative analysis of chosen passages and culture-specific vocabulary elements. The results demonstrate that machine translation consistently maintains general readability, surface-level meaning, and grammatical structure. In certain instances, machine translation (MT) outperformed human translation in terms of faithfulness to the source text's literal semantic content. However, MT frequently decreased emotional intensity, neutralized pragmatic power, and generalized statements that were culturally specific. These restrictions were most noticeable in socially entrenched terms, metaphorical language, and discourse. On the other hand, narrative voice, cultural context, and emotional resonance were better preserved through human translation.

To preserve cultural authenticity, human translators employed techniques like stylistic adaptation and transliteration. Nonetheless, the investigation revealed that human translation occasionally added interpretive expansions that marginally changed the original semantic scope. This investigation yielded some important discoveries. First, grammatical correctness alone cannot be used to evaluate the quality of translation in literary texts; deeper cultural and pragmatic factors also need to be considered. Second, despite tremendous technological advancements, machine translation is still unable to handle materials that are both artistically complex and culturally dense. Third, although human translation offers a deeper level of interpretation, it is not completely free from subjectivity or extrapolation from the original text. By offering a concise comparison of human and machine translation in Uzbek classical literature, this study advances the discipline. The study establishes the groundwork for further research on literary translation in low-resource languages by highlighting the advantages and disadvantages of each strategy.

The structural functioning of MT in literary story, the interpretive role of HT, and the relationship to culture-specific lexical elements are some of the aspects that this study clarifies for future scholars. Consequently, these fundamental comparisons at the basic descriptive level do not need to be repeated in future research. Future research could instead

concentrate on more sophisticated metrics like reader reaction analysis, neural model fitting for Uzbek literary data, quantitative quality evaluation models, or hybrid human-machine post-editing frameworks. Furthermore, greater empirical validation might be obtained by enlarging the dataset to include more literary works, various translators, or multiple MT systems. Analyzing readers' opinions on translation quality may also reveal important information about how the target audience views cultural authenticity and fluency. In conclusion, literary translation is still essentially an interpretive and cultural mediation, even though machine translation is a potent technological tool. The study's findings support the notion that maintaining artistic integrity and cultural richness requires human experience. Yet, they contend that the key to the future of translation studies is not choose between machine and human translation, but rather knowing how to best leverage both of their advantages.

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