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DOI <https://doi.org/10.32782/tps2663-4880/2026.45.1.41>**INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE CONTEXT OF MODERN TRANSLATION PARADIGM (CASE STUDY)****ІНФОРМАЦІЙНО-КОМУНІКАЦІЙНІ ТЕХНОЛОГІЇ В КОНТЕКСТІ СУЧАСНОЇ ПЕРЕКЛАДАЦЬКОЇ ПАРАДИГМИ (АНАЛІЗ КОНКРЕТНОГО ПЕРЕКЛАДУ)****Drabov N.Ju,***orcid.org/0000-0001-7332-6309**Lecturer at the Department of Theory and Practice of Translation  
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The article presents a comprehensive analysis of the potential and limitations linked to the use of Generative Artificial Intelligence models in the field of poetic translation. The relevance of this study is determined by the paradigm transference in the field of translation studies, which shifts from computer-assisted translation tools to the incorporation of Large Language Models, thereby necessitating a redefinition of translation competence and the role of the human translator in the creative process. The analysis is based on the translation of Lina Kostenko's poem into English using Chat GPT, Gemini Pro, and Deep Seek models, and is contrasted with that done by professional translators (S. Galperin, A. Zeyliger). The methodological framework is based on an experimental comparison of machine translation results using both basic and modified input instructions (defining the characteristics of meter, rhyme, and stylistic requirements) and those done by a human translator.

Findings demonstrate a strong correlation between machine translation quality and prompt engineering accuracy. It is proved that simple prompts produce a literal translation and ignore prosodic aspects, while modified and thorough prompts allow for a significant approximation of formal poetic qualities (rhyme and rhythm) for AI. However, a comparative and stylistic analysis shows that AI has a primal incompetence for profound textual hermeneutics since it does not understand cultural associations, undertones, and emotional wholes of the source text, preferring a technical rhyming approach. At the same time, human translation manifests a strategy of creative processing and preservation of the "spirit" of the source text.

On the base of a SWOT analysis, the authors of the paper outline the prospects for using AI as a supplemental aid for translation drafting and rhyme creation, thus providing a "human-in-the-loop" approach. Finally, this article confirms that despite increasing technological literacy among professionals, an essential competence for human translation is and remains a sole privilege of a human translator.

**Key words:** literary translation, Generative AI, LLM, poetry translation, prompt engineering, Lina Kostenko, comparative analysis, human-machine interaction.

У статті здійснено ґрунтовний аналіз можливостей і обмежень використання моделей генеративного штучного інтелекту в перекладі українського поетичного тексту англійською мовою. Актуальність дослідження зумовлена зрушеннями в перекладознавчій парадигмі, пов'язаними з переходом від інструментів комп'ютерно-асистованого перекладу до залучення великих мовних моделей, що потребує переосмислення перекладацької компетентності та ролі людини-перекладача у творчому процесі. Аналіз здійснено на матеріалі перекладів поезії Ліни Костенко, згенерованих моделями Chat GPT, Gemini Pro та Deep Seek, які зіставлено з перекладом, здійсненим професійними перекладачами (С. Гальперін та А. Зейлігер). Методологічну основу дослідження становить експериментальне порівняння результатів машинного перекладу, отриманих як за допомогою базового, так і модифікованого промпту (із заданими параметрами розміру вірша, рими та стилістичних особливостей), із людським перекладом.

Результати дослідження засвідчують чітку залежність якості машинного перекладу від точності та продуманості формулювання запиту. Доведено, що базові запити зумовлюють буквальний переклад й ігнорують просодичні характеристики тексту, тоді як розгорнуті та спеціально сконструйовані інструкції дають змогу суттєво наблизити результат до формальних ознак поетичного тексту, зокрема рими й ритму. Водночас зіставний і стилістичний аналіз показує нездатність штучного інтелекту до глибокого тлумачення та розуміння поетичного тексту, оскільки він не оперує культурними асоціаціями, підтекстами та цілісним емоційним сприйняттям оригіналу, надаючи перевагу технічному римуванню. Натомість аналіз людського перекладу виявляє стратегію творчого опрацювання тексту та збереження його «душі».

На основі SWOT-аналізу автори визначають перспективи використання штучного інтелекту як допоміжного інструменту для підготовки перекладацьких чернеток і добору рим, що відповідає підходу «людина в циклі» ("human-in-the-loop"). Наукова розвідка підтверджує, що попри зростання технологічної обізнаності фахівців,

фундаментальна перекладацька компетентність залишається й надалі винятковою прерогативою людини-перекладача.

**Ключові слова:** художній переклад, генеративний штучний інтелект, великі мовні моделі, поетичний переклад, проектування запитів, Ліна Костенко, зіставний аналіз, взаємодія людини й машини.

**Problem statement.** Contemporary scholarly works in the field of translation studies focus on a radical shift in the technological paradigm. Nowadays, we observe the shift from static tools (CAT tools) to neural networks and large language models (LLMs). It is considered that modern translators cease to be an autonomous entity as they have to act in symbiosis with algorithms, which requires a revision of the concept of “translation competence” towards technological literacy [8, p. 14]. This particularly applies to the issue of literary translation, which has long been considered the “last bastion” of human creativity, unattainable for automation. However, the proliferation of machine translation requires the academic community to develop a critical approach to evaluating its results, especially in highly contextual texts, rather than rejecting the technology [2, p. 25].

**Review of the previous publications on the issue.** The key issue for analyzing poetry translation is the category of creativity. The latest research by A. Toral, who experimentally studied the translation of fiction using Transformer architecture (on which Chat GPT and other models are based), shows that although machines have achieved high lexical accuracy, they still have difficulty maintaining text coherence at the macro level [12, p. 280]. Developing this idea, A. Guerberof-Arenas and A. Toral, in their joint study of the impact of machine translation on the reading experience, argue that readers still perceive “human” translation as more creative and emotionally rich than machine translation, even after post-editing [6, p. 265]. We consider this observation critical to our study of Lina Kostenko’s poem translation as it confirms the hypothesis that AI can successfully imitate form but often loses the “spirit” of the original.

The problem with machine translation systems is that, in many cases, the literary styles of writers cannot be easily conveyed and there is no pre-existing model upon which a system can be built [11]. One can think that the authorial style is not highly significant. However, in literature, shape and function are intertwined.

The idea of “human-in-the-loop” becomes especially significant when employing generative models (Gen AI). Rivas Ginel, M. I., & Moorkens highlight the moral and practical boundaries of automation, contending that machine translation runs the risk of becoming a tool for cultural homogenization in the absence of appropriate human intervention and quality assessment [10, p. 5]. At the

same time, J. Hadley points out that technology can be a powerful tool for “indirect translation,” helping translators work with less common languages or complex texts if the interaction process is set up correctly [7, p. 17].

Although several recent studies have addressed aspects of machine-assisted literary translation, there is a gap in the existing English-language literature regarding the analysis of Ukrainian poetry translation using the latest prompt engineering approaches. Most studies focus on prose or Romanic languages. The lack of a thorough comparison (SWOT analysis) of the performance of different LLM models (Chat GPT, Gemini, etc.) on the material of Ukrainian poetry, using specific prompts for rhyme, meter, and style, calls for the present study.

**The relevance** of the study is determined by the need for empirical verification of the capabilities of generative artificial intelligence in reproducing Ukrainian poetic text in English in order to develop effective strategies for human-machine interaction in literary translation.

**The aim** of the research is to analyze the potential and limitations of using generative artificial intelligence (Gen AI) models in the translation of Ukrainian poetry into English. The study also focuses on establishing a correlation between the type of prompt (instructions) and the quality of the output text, as well as conducting a comparative analysis of machine and human translations of Lina Kostenko’s poetry.

The work uses the following **methodological tools**:

1. Experimental method: generation of translation options by three LLMs (Chat GPT, Gemini Pro, Deep Seek) using two types of prompts: basic (direct translation) and modified (with specified parameters of meter, rhyme, and style).

2. Comparative (contrastive) analysis: identification of lexical-semantic and stylistic differences between the original, machine versions, and human translation (performed by Slava Galperin and Alex Zeyliger).

3. Stylistic and poetic analysis: evaluation of the reproduction of rhythm, melody, tropes, and the phonetic organization of the text.

4. SWOT analysis: systematization of the strengths, weaknesses, opportunities, and threats of using AI in poetic translation.

**Research results.** An experimental study of the translation of Lina Kostenko’s poetry using four

generative artificial intelligence models revealed significant differences in approaches to reproducing poetic form and content, and demonstrated a critical dependence of translation quality on the type of prompt. The analysis was carried out on two levels: basic (direct translation without specific instructions – “translate into English”) and modified (with explicit instructions regarding metrical organization, rhyme, and stylistic features – “translate into English, paying attention to rhyme, meter, stylistic devices”). A comparison of machine translations with human translation by S. Galperin and A. Zeyliger made it possible to outline the limits of technological intervention in the creative process of poetic translation.

Lina Kostenko’s original poem is structured according to the classic cross-rhyming pattern (ABAB CDCD EFEF) with a clear iambic pentameter, creating a dramatic rhythm of the lyrical heroine’s inner conflict. The key images are the metaphor of love as a natural disaster (“поспалює”), the antithesis of icy numbness and fiery combustion (“душу відморожу”, “полум’ям згорю”), and the motif of losing control over one’s own state (“Ще поки можу... але вже не можу”). The phonetic organization of the original is saturated with alliterations of sibilant sounds, which intensifies the emotional tension of the text.

The basic prompt revealed fundamental limitations in all four models in terms of understanding the formal requirements of poetic text. Chat GPT [9], assigned with the basic prompt, demonstrated the greatest arbitrariness in handling the structure of the poem, creating an inconsistent text without a clear rhyme scheme.

Ліна Костенко	Chat GPT (basic prompt)
Спини мене, отямся і отям! Така любов буває раз в ніколи. Вона ж промчить над злама- ним життям, За нею ж будуть бігти видноколи, Вона ж порве нам спокій до струни, Вона ж слова поспалює вустами! Спини мене, спини і схамени, Ще поки можу думати востанне! Ще поки можу... але вже не можу. Настала черга й на мою зорю: Чи біля тебе душу відморожу, Чи біля тебе полум’ям згорю [1].	Stop me – come to your senses, and come to yourself! Such love comes once in never. It will come flashing through a broken life, The horizons themselves will run after it, It will tear our peace down to the last string, It will burn our words away upon our lips. Stop me, stop me – wake me, bring me back, While I can still think, for one last time! While I still can... and yet I already cannot. My star, too, has reached its destined turn: Beside you, will my soul be frozen numb, Or will I burn to ash beside you, all in flame? [9]

The first line of the target text contains twelve syllables instead of the expected ten, which destroys the metrical integrity. The model attempts to compensate for formal shortcomings with emotional intensity of vocabulary, using expressions such as “flashing through” and “burn our words away,” but loses the key antithesis of the original. Instead of a clear contrast between “freeze / burn,” there is a vague “frozen numb / burn to ash,” where the image of ashes clashes with the concept of fiery combustion. The absence of consistent rhyming in the lines “understand / never / life / it” shows that the basic prompt failed to activate the model’s understanding of the need for formal organization of the poetic text.

Suggested the basic prompt, Gemini Pro [5] showed a tendency toward literalism, which led to awkward constructions such as “life of broken fences” instead of “broken life.” This is a typical example of what Toral calls the difficulty of machine translation in preserving macro-level coherence as the model focuses on individual lexemes and fails to capture the metaphorical structure of the poem.

Ліна Костенко	Gemini Pro (basic prompt)
Спини мене, отямся і отям! Така любов буває раз в ніколи. Вона ж промчить над злама- ним життям, За нею ж будуть бігти видноколи, Вона ж порве нам спокій до струни, Вона ж слова поспалює вустами! Спини мене, спини і схамени, Ще поки можу думати востанне! Ще поки можу... але вже не можу. Настала черга й на мою зорю: Чи біля тебе душу відморожу, Чи біля тебе полум’ям згорю [1].	Stop me, wake up, and bring me to my senses! Such love happens once in "nevermore." It sweeps across a life of broken fences, With horizons racing to the fore. It strains our peace until the strings imply it, With lips, it burns the words we try to say! Stop me, oh stop me, make me quiet, While I can still think one last time today! While I still can... but I no longer can. My star has risen, sealing my return: Either beside you, I'll freeze my soul to ice, Or beside you, in fire, I will burn [5].

The ABAB rhyme scheme is partially maintained (“senses / nevermore / fences / fore”), but the quality of the rhymes raises questions: “fences / senses” is an exact rhyme, while “imply it / say / quiet / today” demonstrates inconsistency in the choice of rhyming pairs. We observe that particularly problematic is the first line in the second stanza, where the verb “imply” creates semantic confusion instead of the image of broken strings of peace. The final antithesis “freeze my soul to ice / in fire, I will burn” retains

the basic opposition of the original, but loses its laconic dramaticity due to excessive explication.

Turning to Deep Seek’s [3] translation, we find that it demonstrated the greatest difficulties with the basic prompt, starting the translation with the inaccurate “Spin me” instead of “Stop me,” which drastically changes the semantics of the text. This mistake indicates insufficient contextual processing even at the level of key lexemes. The structure of Deep Seek’s poem is the most chaotic among all models: lines of varying lengths, no clear rhyme scheme, and violations of the metrical pattern.

Ліна Костенко	Deep Seek (basic prompt)
Спини мене, отямся і отям! Така любов буває раз в ніколи. Вона ж промчить над зламаним життям, За нею ж будуть бігти видноколи, Вона ж порве нам спокій до струни, Вона ж слова поспалює вустами! Спини мене, спини і схамени, Ще поки можу думати востаннє! Ще поки можу... але вже не можу. Настала черга й на мою зорю: Чи біля тебе душу відморожу, Чи біля тебе полум’ям згорю [1].	Spin me, come to my senses, oh, come! Such love happens once in a never. It will rush over a broken life, After it, the horizons will run, It will tear our peace to the strings, It will burn words with our lips! Stop me, stop me and come to reason, While I can still think for the last time! While I still can... but I already cannot. My turn has come too, for my dawn: Either beside you, I’ll freeze my soul cold, Or beside you, in flames, I’ll be gone [3].

The construction “Such love happens once in a never” is a direct calque of the original without adaptation to English norms. The image of a star is interpreted literally as dawn, distorting the metaphor of fate in the original. However, Deep Seek preserves the final antithesis with relative accuracy.

The modified prompt with explicit instructions on meter, rhyme, and style radically changed the performance of all models, confirming the hypothesis about the critical importance of prompt engineering for poetic translation.

Assigned with the modified prompt, Chat GPT created a text with a consistent rhyme scheme of АВАВ CDCD EFEF and a relatively stable iambic meter.

Ліна Костенко	Chat GPT (modified prompt)
Спини мене, отямся і отям! Така любов буває раз в ніколи. Вона ж промчить над зламаним життям, За нею ж будуть бігти видноколи,	Stop me – come to yourself, regain your mind! Such love appears but once in nevermore. It will race on through a life already ruined, The very horizons will chase it in their roar.

Вона ж порве нам спокій до струни, Вона ж слова поспалює вустами! Спини мене, спини і схамени, Ще поки можу думати востаннє! Ще поки можу... але вже не можу. Настала черга й на мою зорю: Чи біля тебе душу відморожу, Чи біля тебе полум’ям згорю [1].	It will tear our fragile peace down to one string, It will scorch our words upon our burning lips. Stop me – stop me now, restrain this reckless thing, While I still can think before all thinking slips! While I still can... though now I scarcely can. The turn has come as well unto my star: Beside you – will my soul be frozen numb, Or will I burn beside you, flame and scar? [9]
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The second line of the first stanza demonstrates a creative adaptation of the original image with an allusion to Poe (“nevermore”), which adds an intertextual aspect to the translation. The rhymes “mind / ruined / roar” (slant rhyme) and “string / lips / thing / slips” (exact rhymes) indicate a significantly higher level of formal organization. The metaphor “race on through a life already ruined” conveys the spontaneity of love, and the expression “The very horizons will chase it in their roar” intensifies the image. However, Chat GPT also introduces unnecessary images that are absent in the original: “fragile peace,” “reckless thing,” “flame and scar.” We consider it a typical compensation strategy when the model tries to enhance emotionality through additional epithets, which violates the principle of economy of Lina Kostenko’s original text.

The modified version of Gemini Pro [5] achieved the most consistent rhyming organization among machine translations.

Ліна Костенко	Gemini Pro (modified prompt)
Спини мене, отямся і отям! Така любов буває раз в ніколи. Вона ж промчить над зламаним життям, За нею ж будуть бігти видноколи, Вона ж порве нам спокій до струни, Вона ж слова поспалює вустами! Спини мене, спини і схамени, Ще поки можу думати востаннє! Ще поки можу... але вже не можу. Настала черга й на мою зорю: Чи біля тебе душу відморожу, Чи біля тебе полум’ям згорю [1].	Stop me, wake up, and force me to be sane! Such love happens once in nevermore. It sweeps above a life broken in twain, With all horizons rushing to the fore. It tears our peace to strings of tension deep, It burns the words with lips of searing heat! Stop me, oh stop! Awake me from this sleep, While I still have a final thought to meet! While I still can... but I can resist no more. My star has risen, sealing my return: Either beside you, I’ll freeze to the core, Or else beside you, in a flame, I’ll burn [5].

The cross-rhyming pattern is maintained by Gemini Pro using the exact rhymes “sane / nevermore / twain / fore” and “deep / heat / sleep / meet”. The metrical structure is close to iambic pentameter, although some lines manifest certain deviations. The image of “life broken in twain” is perceived as an archaism, which imparts the text with a sublime tone, corresponding to the original. The first line of the second stanza is a successful combination of the image of broken strings with emotional tension, although the word “tension” explicates the sense, which is conveyed metaphorically in the original poem. The final antithesis retains the structure of the original, but loses the image of the soul, replacing it with the abstract phrase “to the core”. Thus, we may state, that Gemini Pro found the best balance between formal requirements and semantic accuracy among the machine-based options.

Deep Seek [3], with the modified prompt, significantly improved the formal organization compared to that produced according to the basic prompt, creating a rhyme scheme with mostly accurate rhymes.

Ліна Костенко	Deep Seek (modified prompt)
Спини мене, отямся і отям! Така любов буває раз в ніколи. Вона ж промчить над злама- ним життям, За нею ж будуть бігти видноколи, Вона ж порве нам спокій до струни, Вона ж слова поспалює вустами! Спини мене, спини і схамени, Ще поки можу думати востанне! Ще поки можу... але вже не можу. Настала черга й на мою зорю: Чи біля тебе душу відморожу, Чи біля тебе полум'ям згорю [1].	Stop me, come to my senses, and stay! Such love comes once in a never. It will rush over a life broken and gray, After it, horizons will race forever. It will tear our peace to shreds, to the string, It will burn words with my breath, with my burning! Stop me, stop me, and wake to the cost, While I can still think one last thought! While I still can... but already I cannot. Now my own dawn's turn has been brought: Either beside you, my soul will frost, Or beside you, in flame, I'll be caught [3].

The construction “come to my senses, and stay” contains the added imperative “stay”, absent in the original, but functional for the English text, as it creates a rhyme. The image “a life broken and gray” introduces a coloristic epithet, concretizing and layering the abstract “broken life”. Using the metaphor “horizons will race forever”, the language model transforms the one-time event of the original (“will sweep”) into an eternal process, which somewhat changes the temporality of the text. Particularly interesting is the second line of the second stanza,

where the repetition of “burn / burning” creates an internal rhyme structure and phonic play absent from the original. However, this strategy leads to redundancy. The final dilemma “my soul will frost / in flame, I'll be caught” preserves the antithesis, but “be caught” is semantically weaker than “згорю”, lacking the active efficacy of the original.

The next stage in our study was a comparison of machine translations with the human version by S. Galperin and A. Zeyliger. The human translation reveals a difference in choosing translation strategies from those used by the language models. The human translation begins with the expressive “Oh, stop me”, where the exclamation enhances the emotionality of the text. The construction “halt my dreams” is a creative interpretation of the original “опам'ятайся”. The translators transform the appeal to reason into an appeal to stop dreaming, which deepens the internal conflict between the rational and the emotional.

Ліна Костенко	Slava Galperin & Alex Zeyliger
Спини мене, отямся і отям! Така любов буває раз в ніколи. Вона ж промчить над злама- ним життям, За нею ж будуть бігти видноколи, Вона ж порве нам спокій до струни, Вона ж слова поспалює вустами! Спини мене, спини і схамени, Ще поки можу думати востанне! Ще поки можу... але вже не можу. Настала черга й на мою зорю: Чи біля тебе душу відморожу, Чи біля тебе полум'ям згорю [1].	Oh, stop me, come to senses, halt my dreams! Such love descends from heaven once in never. Over my broken life like a typhoon it screams And leaves behind horizons in its fervor. It tears our serenity to bits, Its fiery lips are scorching words to ashes! Oh, stop me, stop — and help me find my wits Before my sanity forever crashes! While reason holds... but no, the hope is lost. At last my hour has come to see the dawn: For next to you my soul will turn to frost Or next to you I will enflame and burn [4].

The metaphor “Such love descends from heaven once in never” adds a vertical dimension that is missing in the original: love does not just happen rarely, but descends from heaven, which gives it a sacred meaning. The image “like a typhoon it screams” is the most intense metaphor among all the translations, where love does not just sweep by, but screams like a typhoon, creating a synesthetic effect.

S. Galperin and A. Zeyliger transform the image of horizons chasing love. They substitute the active subjects of the original by a passive trace left by the elements. This shift in perspective changes the dynamics of the image since instead of a chase, a picture of devastation emerges. The metaphor “It tears our serenity to bits” concretizes the abstract

“спокій” through the word “serenity”, which has philosophical connotations, and the expression “to bits” is more colloquial than “to shreds”, which creates an interesting stylistic contrast. The image “Its fiery lips are scorching words to ashes” radically transforms the original – the lips become not the object, but the subject of burning, and the words turn into ashes, which is a more complete image of destruction than just burning.

The appeal “Oh, stop me, stop – and help me find my wits” introduces the motif of losing one’s mind through the expression “find my wits”, which is the idiomatic English equivalent of “опам’ятайся”. The repetition of “stop me, stop” creates a rhythmic pause that dramatizes the moment of final realization. The use of the verb “crashes” engenders the image of the typhoon at the beginning of the poem, creating a compositional arch. The line “While reason holds... but no, the hope is lost” is the most philosophical of all the translations. Here reason does not simply weaken, but “holds”, which generates the image of the last resistance, and hope is explicitly lost, which is not in the original.

The final stanza of the human translation introduces the image of dawn. This is a creative interpretation of the original “it’s my turn to see the dawn”: instead of an abstract turn, a concrete moment of meeting the dawn arises, which gives the text an existential dimension. The antithesis “my soul will turn to frost / I will enflame and burn” preserves the structure of the original, but uses the archaic “enflame”, which raises the stylistic register of the text. The rhyme pair “dawn / frost” is a slant rhyme, and “lost / frost” and “dawn / burn” create a complex phonic structure that resonates with the emotional complexity of the text.

The key difference between human and machine translation is the consistent strategy of intensifying images and emotions. Where machines strive for the accuracy of conveying individual elements, human translators create a holistic emotional trajectory even if it means sacrificing literal accuracy for poetic effect. Constructions such as “descends from heaven”, “like a typhoon it screams”, “scorching words to ashes”, “my sanity forever crashes” are more dramatic and figurative than the corresponding machine translation variants. The cross-rhyming pattern is sustained with mostly exact rhymes, the metrical structure is close to iambic pentameter, which indicates a high level of technical skill.

At the same time, the human translation contains the most deviations from the original at the semantic level. They add the celestial origin of love, the transformation of horizons into a passive element, the transformation of lips into an active subject of

burning, the explication of the loss of hope. However, we should note that these transformations are not errors, they are conscious strategic decisions aimed at creating a poetic text that functions in the English-speaking cultural context. Here we see vindication of the thesis of A. Guerberof-Arenas and A. Toral that readers identify human translation as more creative [6] since creativity is manifested not in the accuracy of reproduction, but in the ability to create a new organic poetic text.

The analysis of the impact of the modified prompt on the quality of translations allows us to draw an important conclusion about the correlation between the explicitness of the instructions and the formal organization of the text. The basic prompt activated the models’ predominantly semantic level of processing, while the modified prompt with indications of meter, rhyme, and style forced the models to take into account the formal parameters of the poetic text.

However, even the modified prompt did not eliminate the fundamental limitations of machine translation of poetry. All models showed a tendency towards literalism at the level of individual images, an inability to make consistent stylistic transformations, and weak intertextual competence. Chat GPT’ allusion to Poe in the phrase “nevermore” (Poe’s famous poem “The Raven”) is a coincidence, not a conscious intertextual strategy. No model was able to create a compositional arch at the level of images; as human translators did through the resonance of “typhoon / crashes”. In addition, the phonic organization of machine translations remains mechanical. The rhymes are selected on the formal basis of sound similarity, without taking into account the semantic and stylistic connections between the rhyming words.

Particularly telling for the authors of this article is the inability of models to work with implicit meanings and cultural connotations. The image of the dawn in the original has complex semantics, associated with the Ukrainian folklore tradition, where the dawn (“зоря”) is a symbol of fate and destiny (note the idiom: “вірити у свою або чию [щасливу] зорю”). Human translators transform this into “my hour has come to see the dawn”, preserving the existential dimension through the biblical allusion to the “hour” as the moment of judgment. Machine translations interpret the image literally, which results in the loss of the cultural specificity and depth of connotations.

Analysis of stylistic devices reveals that the models successfully reproduce basic tropes (metaphor, antithesis), but have difficulty with complex stylistic constructions. The synesthesia of the original, where

words burn with the lips (a combination of touch, taste, sight), is reduced in machine translations to a simple metaphor of burning. The gradation of emotional tension, which increases from the first to the third stanza of the original, is only partially preserved since the models capture individual moments of intensity, but do not create a coherent emotional pattern. Human translation achieves the greatest emotional intensity through the accumulation of expressive devices: exclamations, repetitions, archaisms, verbs with dramatic meanings.

Rhyme organization is the most objective criterion for assessing the formal competence of models. In the modified versions, all models achieved the rhyme scheme, but the quality of the rhymes varied. Gemini Pro produced the most accurate rhymes (sane/twain, deep/sleep, fore/more), Chat GPT combined accurate and slant rhymes (mind/ruined – imperfect rhyme, string/thing – accurate), Deep Seek used mostly accurate rhymes with some imperfect ones (stay/gray, cost/lost). Human translation uses the most complex rhyme structure with a combination of accurate, slant rhymes, and visual rhymes, which creates a multilayered phonic organization.

Metrical structure proved to be the most challenging aspect for machine reproduction. The original was written in iambic pentameter with occasional deviations for emphasis. No model has achieved consistent reproduction of this size: Chat GPT fluctuates between iambic tetrameter and pentameter, Gemini Pro tends towards pentameter with anapestic substitutions, Deep Seek exhibits the greatest metrical instability. The human translation is closest to consistent iambic pentameter, although it also contains strategic deviations to emphasize emotional climaxes.

The lexical level reveals interesting trends in the models' choice of stylistic registers. Chat GPT tends to use elevated vocabulary with Romance roots (fragile, scorch, reckless), Gemini Pro combines archaisms (twain) with neutral vocabulary, Deep Seek uses the simplest vocabulary with Germanic roots. Human translation reaches the highest stylistic register through the use of archaisms (enflame), biblical allusions (hour has come), and elevated vocabulary (serenity, fervor, sanity). These poetic means in human translation indicate a conscious strategy of stylistic elevation, which corresponds to Lina Kostenko's status as a classic of Ukrainian poetry.

Syntactic organization also demonstrates the differences between machine and human approaches. Models tend to preserve the syntactic structure

of the original, creating parallel constructions (It will... It will...). Human translation allows itself greater syntactic freedom: inversions (descends from heaven such love), ellipsis (Oh, stop me, stop), complex subordinating constructions (Before my sanity forever crashes). This syntactic flexibility allows for a more dynamic text with a variable rhythm, while machine translations sound more monotonous due to syntactic parallelism.

The analysis of all translations allows us to formulate a SWOT matrix for the use of generative AI in poetic translation (see Table 1).

The strengths of the technology include the speed of generating multiple variants, the ability to formal rhyme with the appropriate prompt, the preservation of the basic semantics of the original, the possibility of experimenting with different stylistic registers. The modified prompt demonstrates that the models are capable of significantly improving formal parameters with explicit instructions. This opens up prospects for using AI as a tool for generating drafts that the translator can further process.

The weaknesses of the technology are revealed at all levels of the poetic text. Models demonstrate an inability to holistic compositional thinking, creating a mechanical set of locally correct solutions without a global strategy. Cultural competence remains extremely limited because AI does not capture culturally specific connotations, is not capable of conscious intertextual dialogue, and loses implicit meanings. The emotional aspect of the text is reduced to a set of local emotional markers without increasing tension. The phonic organization remains formal, devoid of semantic motivation. The analysis has proven that the most serious weakness is the inability of models to creative transformations at the level of images. Where human translators create new figurative series (typhoon, ashes, collapse of the mind), machines are mostly limited to literal reproduction.

The possibilities of the technology are related to its potential as a tool in the translation process. AI can generate multiple variants of translation of individual lines, suggest rhyme pairs, experiment with different metrical schemes. It is especially valuable for translation from less widely used languages, where the translator can use machine translation as an intermediate stage to create a final version. In addition, the concept of the human-in-the-loop is obvious here as the translator can use AI to generate basic variants, which are then subjected to careful editing and creative reworking. The experiment with modified prompt proves that the quality of machine translation critically depends

Table 1

**SWOT Analysis: AI in Poetry Translation**

<b>Strengths</b>	<b>Weaknesses</b>
Rapid generation of multiple variants. Formal rhyme capability with proper prompting. Preservation of basic semantic content. Experimentation with stylistic registers. Useful for draft generation. Accessibility for lesser-known languages.	Inability for holistic compositional thinking. Limited cultural competence. Loss of culture-specific connotations. Reduction of emotional load. Mechanical phonic organization. Literal reproduction over creative transformation. Inconsistent meter maintenance. Loss of implicit meanings.
<b>Opportunities</b>	<b>Threats</b>
Human-in-the-loop collaboration model. Tool for generating translation drafts. Assistance with lesser-known language pairs. Development of prompt engineering competence. Educational tool for translation students. Combination with CAT tools. Rapid comparative analysis possibilities.	Risk of cultural homogenization. Standardization of poetic forms. Loss of cultural specificity. Illusion of sufficiency for non-experts. Ethical issues with undisclosed AI use. Devaluation of human translator expertise. Asymmetry in language representation.

on the accuracy of the instructions, which requires the translator to have developed prompt engineering competence.

The threats of using technology are primarily related to the risk of cultural homogenization, which M. I. Rivas Ginel and J. Moorkens warn about [10]. If machine translation of poetry becomes a mass practice without proper human control, this will lead to the standardization of poetic forms and the loss of cultural specificity. The models are trained mainly on English-language texts, which creates an asymmetry towards the Anglo-American poetic tradition. Ukrainian syllabic-tonic verse, with its specific phonics and cultural connotations, risks being reduced to universal English-language templates. The illusion of the sufficiency of machine translation is especially dangerous as formally correct rhymes and approximate meter can create the impression of a high-quality translation in non-specialists, while a specialist will see a loss of poetic depth.

We believe that the ethical issues of using AI in literary translation also need to be considered. If a machine translation is published without indicating its origin, this misleads the reader about the nature of the translation process. At the same time, completely abandoning the use of technology in situations where it is clearly effective for certain tasks seems unreasonable. In our opinion, the optimal strategy is transparency, i.e., using AI as a tool at certain stages of the translation process with a mandatory indication of this fact and with final human editing of the text.

**Conclusions.** The results of the study confirm the hypothesis that generative AI can imitate the form of a poetic text, especially with a properly

constructed prompt, but loses its spirit, creative energy and cultural specificity. It should be noted, however, that the present analysis is based on a limited corpus and a single poetic text. While this allows for close qualitative scrutiny, it does not permit broad generalizations about AI-based poetry translation as a whole.

The authors of the article found out that the correlation between the type of prompt and the quality of the translation is direct and significant. However, it does not eliminate the fundamental limitations of the technology. A comparison with human translation reveals a qualitative difference in creative strategies – in cases, where the machine optimizes local solutions, the human translators create a unified poetic strategy. It proves the findings of A. Guerberof-Arenas and A. Toral that readers identify human translation as more creative and emotionally rich.

Thus, we may conclude that the place of AI in the modern translation field may be defined as an auxiliary tool. It can significantly accelerate certain stages of the translation process, but cannot totally replace a person in the creative act of translating poetry. Kenny’s concept of a translator in symbiosis with algorithms acquires concrete meaning: the modern translator must possess not only traditional competencies (knowledge of languages, cultures, poetics), but also new technological skills including prompt engineering, critical evaluation of machine output, post-editing, etc. Nowadays, translation competence tends towards technological literacy, but creative intuition, cultural sensitivity and poetic skill remain exclusively human attributes, inaccessible to modern even most advanced AI models.

## REFERENCES:

1. Костенко Л. Спины мене. *Бібліотека української літератури*. 1977. URL: <https://www.ukrlib.com.ua/books/printit.php?tid=13078>
2. Bowker L., Ciro J. B. *Machine Translation and Global Research: Towards Improved Machine Translation Literacy in the Scholarly Community*. Emerald Group Publishing, 2019. 128 p.
3. Deep Seek-AI. *Deep Seek* (V2 version), 2026. URL: <https://chat.deepseek.com/>
4. Galperin S., Zeyliger A. Oh, stop me, come to senses, halt my dreams! *Medium*. 2016. URL: <https://zarinaza-brisky.medium.com/a-love-poem-translating-lina-kostenko-72c7d78ee184>
5. Google. *Gemini* (Pro 1.5 version), 2026. URL: <https://gemini.google.com/>
6. Guerberof-Arenas A., Toral A. The impact of post-editing and machine translation on creativity and reading experience. *Translation Spaces*, 2020. Vol. 9. Issue 2. P. 255–282.
7. Hadley J. L. Literary Machine Translation. *Counterpoint*, 2020. Issue 4. P. 14-18.
8. Kenny D. (ed.). *Machine Translation for Everyone: Empowering Users in the Age of Artificial Intelligence*. Berlin: Language Science Press, 2022. 210 p.
9. Open AI. *Chat GPT*. Version GPT-5.2, 2026. URL: <https://chat.openai.com>
10. Rivas Ginel M. I., Moorkens J. Translators' trust and distrust in the times of Gen AI. *Translation Studies*, 2025. Vol. 18. Issue 2. P. 1-17.
11. Thai K., Karpinska M., Krishna K., Ray B., Inghilleri M., Wieting J., Iyyer M. Exploring Document-Level Literary Machine Translation with Parallel Paragraphs from World Literature. *Proceedings of the 2022 Conference on Empirical Methods in Natural Language Processing*, 2022. P. 9882–9902.
12. Toral A. Machine Translation of Novels in the Age of Transformer. *Maschinelle Übersetzung für Übersetzungsprofis*. BDÜ Fachverlag, 2020. P. 275-293.



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