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Visualizing through language:
A study on generative language models

Wizualizacja poprzez język:
badanie generatywnych modeli języka

Abstract

The article addresses the relationship between language, literary translation, and visualization generated by artificial intelligence. The analysis focuses on selected fragments of works by Pavel Bazhov and Fyodor Dostoevsky, examined in the original Russian as well as in Polish and English translations. The study consisted of two stages: (1) a comparative analysis of translations in terms of semantics, style, and cultural aspects, and (2) a survey experiment with 220 Polish-speaking respondents who evaluated AI-generated illustrations based on three language variants of the same fragments.

The results show that even subtle translational shifts influence how artificial intelligence interprets and visualizes literary texts. Moreover, respondents preferred illustrations generated from Polish prompts (52.5% of choices), which supports the hypothesis of "imagining in one's own language" and confirms the concept of the linguistic worldview. This effect proved statistically significant and relatively stable regardless of participants' age.

The article demonstrates that combining traditional methods of translation studies with new AI tools opens new perspectives for interdisciplinary research on the role of language in shaping literary and visual imagination.

Keywords: literary translation; linguistic worldview; artificial intelligence; text visualization; survey study

Streszczenie

Artykuł podejmuje problem relacji między językiem, przekładem literackim a wizualizacją generowaną przez sztuczną inteligencję. Analizie poddano fragmenty twórczości Pawła Bażowa i Fiodora Dostojewskiego w oryginale rosyjskim oraz w przekładach na język polski i angielski. Badanie obejmowało dwa etapy: (1) analizę porównawczą tłumaczeń pod kątem semantycznym, stylistycznym i kulturowym oraz (2) eksperyment ankietowy z udziałem 220 polskojęzycznych respondentów, którzy oceniali ilustracje wygenerowane przez modele AI na podstawie trzech wariantów językowych tych samych fragmentów.

Wyniki wskazują, że nawet subtelne przesunięcia translatorskie wpływają na sposób, w jaki sztuczna inteligencja interpretuje i wizualizuje tekst literacki. Co więcej, respondenci preferowali ilustracje tworzone na podstawie polskich promptów (52,5% wyborów), co potwierdza tezę o „obrazowaniu we własnym języku" i wspiera koncepcję językowego obrazu świata. Efekt ten okazał się statystycznie istotny i względnie stabilny niezależnie od wieku uczestników.

Artykuł pokazuje, że łączenie tradycyjnych metod przekładoznawczych z nowymi narzędziami sztucznej inteligencji otwiera perspektywę dla interdyscyplinarnych badań nad rolą języka w kształtowaniu wyobraźni literackiej i wizualnej.

Słowa kluczowe: przekład literacki; językowy obraz świata; sztuczna inteligencja; wizualizacja tekstu; badanie ankietowe

Introduction

This article presents an interdisciplinary study aimed at demonstrating how subtle lexical, stylistic, and cultural differences in translations of classical literature influence the perception of a text and its visualization – both in the reader's imagination and in illustrations generated by artificial intelligence (AI). The analysis focuses on selected fragments from works by Pavel Bazhov and Fyodor Dostoevsky in three linguistic variants: Russian (the original), Polish, and English (translations).

A key component of this research is a comparative examination of translations – both along the Russian–Polish axis and the Polish–English axis. The study examines semantic, stylistic, and culturally conditioned shifts, with a particular focus on translation strategies and their impact on the reader's mental imagery, as well as on AI-driven interpretation. Investigating the visual consequences of translation reveals how even minor semantic or stylistic modifications may lead to markedly different representations – both in readers' minds and in AI-generated imagery.

In the experimental part of the study, each language variant was used as input to AI-based image generation tools (ChatGPT and Sora). Three separate visualizations were produced for each fragment, corresponding to the Russian original and the Polish and English translations. Subsequently, an online survey was conducted among Polish-speaking participants. Each respondent read a short fragment in their native language and then selected, from three illustrations, the one that, in their opinion, best reflected the textual content and atmosphere of the scene.

This approach made it possible not only to examine individual visual preferences among Polish readers but also to determine whether they more frequently choose illustrations generated from their mother tongue or from foreign-language prompts. The findings suggest that the language used by AI during the image-generation process reflects not only semantic content but also culturally embedded interpretive frameworks associated with

a given linguistic code. The study, therefore, highlights the interplay between language, visual perception, and imagination and points to the potential of AI in translation analysis, education, and intercultural communication.

This project constitutes the first attempt in Poland to combine literary studies, translation studies, and contemporary AI-based tools in research on translations of canonical literary texts. The results demonstrate the relationships between language, translation, visual perception, and imagination, while also indicating both the possibilities and limitations of employing AI in the humanities and intercultural mediation. The observations presented here have practical implications for translators, literary scholars, and developers of AI technologies, emphasizing the need to account for cultural and linguistic context in the interpretation and visualization of literary texts.

Theoretical background

Language and the visualization of reality

The relationship between language and the perception of reality has long been the subject of linguistic inquiry. Edward Sapir (1929) and Benjamin Lee Whorf (1956) emphasized that the structure of a language influences how its speakers conceptualize the world. In the Polish tradition, this line of thinking is further developed in the framework of the *linguistic worldview* (*językowy obraz świata*) proposed by Jerzy Bartmiński and Ryszard Tokarski, which argues that language preserves culturally specific categories and values (Bartmiński, 2009; Tokarski, 2013). Thus, every lexical item carries not only denotative meaning but also culturally embedded connotations.

Metaphor plays a particularly important role in both fairy-tale and realist literature, as noted by George Lakoff and Mark Johnson (1980), who argue that metaphor structures the way in which we think and imagine. Translating metaphors often results in interpretive shifts: for example, the Russian *алмаз* carries a sense of magical aura, whereas the Polish *diament* shifts the meaning toward the domain of jewelry and aesthetic value.

Therefore, literary translation is not merely a transfer of content but a reinterpretation of the linguistic worldview encoded in the source text. Each language – through its semantics and metaphorical system – organizes perception differently, affecting the imagery that emerges in the reader's imagination. This assumption forms the basis for our comparative analysis, which investigates how differences between the original and its translations shape both human perception and AI-generated visualizations.

Translation as an interlingual and intercultural process

Literary translation involves navigating between fidelity and creative freedom. Eugene Nida (1964) distinguished between formal equivalence – focused on preserving the structure of the source text – and dynamic equivalence, oriented toward achieving a comparable effect on the target audience. A similar dichotomy was proposed by Peter Newmark (1988), who contrasted semantic translation, faithful to the meanings of the source text, with communicative translation, which prioritizes stylistic norms and naturalness

for the target-language reader. In both frameworks, it becomes evident that translating classical literature often requires departing from literalness in order to maintain the atmosphere and aesthetic qualities of the original work.

This dimension is further complicated by cultural factors. Lawrence Venuti (1995) highlights the opposition between foreignization and domestication strategies. Foreignization exposes the foreignness of the text and invites the reader into the world of the original culture, while domestication adapts the text to the literary expectations of the target culture. Thus, translations of Russian literature into Polish or English may differ in solemnity, simplicity, or realism – depending on the literary and cultural conventions of the receiving audience. Translation therefore becomes not only a transfer of content, but also an adaptation to the expectations and interpretive habits shaped within a given cultural environment.

Translation techniques

The style and genre of the original text may lead the translator to adopt different translation techniques. In classical and fairy-tale literature, the decision whether to preserve local colour or to adapt the text to the conventions of the target culture is reflected in specific translational solutions. Jean-Paul Vinay and Jean Darbelnet (1958/1995) emphasised in their classification that translation is not limited to copying linguistic structures but involves the use of various procedures that enable a more flexible adjustment of the text to the requirements of another linguistic and cultural system.

Given the nature and stylistic features of classical literature, it is reasonable to expect that translators frequently employ techniques leading to subtle semantic and stylistic shifts. The most relevant among them include transposition (changing the grammatical category), modulation (altering the semantic perspective), equivalence (searching for a situational counterpart, e.g. in idioms or proverbs), and adaptation (aligning elements of the text with the cultural reality of the target audience). These techniques, due to their influence on style, imagery, and cultural embeddedness, appear particularly likely to shape the translations examined in this study.

AI as a new research tool

The application of artificial intelligence in the humanities is a relatively new phenomenon and still lacks clearly defined theoretical frameworks. Although recent years have seen numerous attempts to employ generative models across diverse disciplines, literary studies and translation studies remain fields where such approaches are only beginning to emerge. The absence of an established theoretical background means that current research initiatives are often experimental and interdisciplinary, combining linguistic, cultural, and technological perspectives.

This study aligns with these innovative developments, as it goes beyond linguistic analysis of translation and incorporates AI-generated visualisation as an additional research lens. Such an approach enables not only the identification of semantic and stylistic differences but also their transformation into visual forms that concretely demonstrate how language and translation shape imagination. The fact that no unified theory exists

yet for this kind of methodology underscores the experimental nature of the project and highlights the need for further work toward establishing methodological tools for digital humanities.

Methodology

The methodology of the study comprised two complementary stages. The first focused on the analysis of literary translations, in which selected fragments from the Russian originals were compared with their Polish and English translations in terms of semantic, stylistic, and cultural differences. The second stage involved a questionnaire-based experiment aimed at empirically verifying the influence of the prompt language on respondents' visual choices regarding illustrations generated by artificial intelligence. The combination of qualitative text analysis and quantitative survey research made it possible to capture both the specific mechanisms of translation and their potential impact on the visual reception of literary texts.

Part I: Analysis of literary translations

The research material was selected based on the works of authors who hold a prominent position in Russian literature and enjoy global recognition. The choice of passages from Pavel Bazhov and Fyodor Dostoevsky was motivated by their strong cultural significance and deep rootedness in Russian tradition, which enabled the study to capture the specificity of translating texts firmly embedded in a given cultural context. The analysis encompassed a variety of fragment types – descriptive passages (e.g., the interior of a chamber), depictions of nature (a stone forest, a stormy night), and character portrayal (an elderly woman). This diversity made it possible to explore different translational challenges and observe how various forms of description influence both the translation process and subsequent visualizations.

The study examined original Russian fragments alongside their Polish and English translations. The juxtaposition of these three linguistic versions enabled a comparison of different literary and aesthetic traditions – from the Slavic, rich in folklore and metaphor, through the Polish, often characterized by elevated and fairy-tale-like narrative, to the more restrained and realistic Anglo-Saxon tradition. This allowed the identification of differences stemming not only from linguistic systems but also from culturally conditioned stylistic norms.

The analysis focused on the semantic and stylistic layers of the texts, particularly the use of metaphor, changes in register, and stylistic shifts introduced by translators. Attention was also given to the potential impact of these shifts on the readers' mental imagery as well as on the behavior of artificial intelligence models generating images from textual prompts. The interpretive basis for this part of the study drew on the theoretical concepts discussed in the earlier section of the article, including the linguistic worldview framework and classical theories of equivalence and translation strategies.

The analysis was qualitative and descriptive in nature. Rather than aiming to statistically capture phenomena across entire works, it sought to provide a detailed comparison of selected excerpts in three linguistic versions. This approach helped illustrate how translational decisions lead to semantic and stylistic shifts that may subsequently affect the visual reception of literature.

Part II: Survey study

Prior to conducting the survey, a set of illustrations was generated using artificial intelligence tools. The images were created on the basis of selected fragments of Russian literature and their Polish and English translations. Each fragment was visualized through three distinct illustrations, corresponding to prompts in three languages: Russian, Polish, and English. This visual dataset then served as the basis for the empirical study.

The goal of the survey was to examine whether speakers of Polish would prefer illustrations generated from prompts written in their native language, or whether the language of the prompt plays no significant role in evaluating the adequacy of visualizations relative to the literary text. The use of a questionnaire allowed for the collection of responses from a larger group of participants, thus enabling a broader verification of the hypothesis.

The survey was administered electronically via the Google Forms platform. Participants were asked to read a literary fragment in Polish and subsequently select the one illustration – out of three presented – that they believed best reflected the content of the passage. The study was anonymous and conducted under identical conditions for all respondents.

A total of 220 individuals took part in the survey. Demographic characteristics were not analyzed in detail, as they were not the primary focus of the research. The results were examined using statistical procedures, including dependence tests and regression models, which made it possible to explore the relationship between the language of the prompt and the participants' choices. The study can be described as experimental and exploratory in nature – not aimed at confirming established theoretical claims, but rather at empirically testing a new hypothesis and identifying directions for further research in this emerging area.

Analysis of translations of selected Russian literary fragments

The purpose of this section is to compare three linguistic versions of the same literary fragments: the Russian original and its translations into Polish and English. Such comparison enables us to identify differences in how imagery and interpretation of narrative scenes are constructed across languages, and thus demonstrates the impact of linguistic coding on the representation of the literary world.

The analysis includes fragments of diverse character: metaphorical descriptions rich in symbolic content, depictions of natural landscapes, and character portrayals. Each of these text types poses different challenges for the translator and reveals the use of different translation strategies – from metaphor rendering, through the representation

of environmental details, to the depiction of a character's physical features. The analysis focuses on semantic, stylistic, and cultural differences, showing how one literary passage can be interpreted differently depending on the language.

This comparative approach is particularly important for the subsequent empirical section of the study. It highlights that translational shifts do not only affect the linguistic layer of the text, but may also influence visual representations generated by artificial intelligence. If such differences shape how readers conceptualize literary scenes, they may likewise affect respondents' choices in the survey, thus demonstrating the role of the prompt language in visual interpretation.

The analysis follows a two-directional structure. First, the Russian original is compared with the Polish translation to identify specific translational procedures applied in relation to the source text. Second, the Polish and English versions are juxtaposed, revealing interpretative differences resulting from the particularities of the respective linguistic and literary traditions – independent of the Russian original.

Fragment 1. Description of the chamber

The first analysed passage comes from Bazhov's work and presents a description of an interior chamber. It was selected due to its richness of detail and the symbolic dimension of space, which in the Russian original carries a distinctly cultural meaning. The translation of this fragment therefore requires rendering not only material reality, but also the metaphorical character embedded in the description.

Павел Петрович Бажов „Госпожа Медной горы"

И видит Степан огромную комнату, а в ней постели, столы, табуреточки – все из корольковой меди. Стены малахитовые с алмазом, а потолок темно-красный под чернетью, а на ем цветки медны.

Bażow Paweł "Gospodyni Góry Miedzianej"

Widzi Stiepan ogromną komnatę,a w niej pościel, stoły, stołeczki - wszystko z kryształów samorodnej miedzi. Ściany malachitowe z diamentami, powała czarniawo-pąsowa, na niej miedziane kwiatki.

Pavel Bazhov "The Mistress of the Copper Mountain"

Stepan saw they were in a huge chamber, with a couch, and tables and stools all pure copper. The walls were of malachite studded with diamonds and the roof dark crimson with a tinge of black, and flowers of copper on it.

Comparative analysis: Russian original vs. Polish translation

At the lexico-semantic level, the Russian term "*корольковая медь*" used by Bazhov carries both a folkloric and a mineralogical dimension, referring to a material of almost magical nature deeply rooted in the Ural fairy-tale tradition. In the Polish translation, this expression becomes "*kryształy samorodnej miedzi*", which emphasizes the natural value and shine of the material. However, this modification results in the loss of local, culturally anchored specificity. Similarly, the Russian "*алмаз*" conveys a sense of magical power important in the fairy-tale context, whereas Polish "*diamenty*" evokes associations with the world of jewelry and luxury, shifting the interpretation towards material wealth rather

than enchanted luminosity. As a result, the described interior appears more decorative and ornate rather than mysteriously radiant.

The phrase "*темно-красный под чернетью*" represents a nuanced, poetic description of color balancing between light and darkness with a strong dramatic undertone. Its Polish counterpart "*czarniawo-pąsowa*" reinforces the impression of opulence and ornamentality, softening the contrast present in the original.

Stylistically, Bazhov's prose relies on a folkloric register: short, concrete constructions, clear rhythm, and simple syntax build authenticity and oral-tale dynamics. In contrast, the Polish translation introduces a more elevated, literary tone, visible in vocabulary choices such as "*pościel*", "*czarniawo-pąsowa*", and "*z kryształów samorodnej miedzi*", which makes the text sound more refined and embellished.

In summary, the Polish translation shifts the emphasis from the folk simplicity and restrained magical realism of the Russian original toward a more aesthetically opulent, decorative representation. While the Russian text preserves an aura of mystery and enchanted restraint, the Polish version brings the scene closer to a baroque-like richness. These differences demonstrate how translational choices shape the mood and interpretation of the literary image.

Comparative analysis: Polish translation and English translation

At the stylistic level, the Polish translation of the first fragment from Paweł Bażow's *Gospodyni Góry Miedzianej* is characterized by a richness of metaphors and vividness of description. Expressions such as „*ściany malachitowe z diamentami*" or "*powała czarniawo-pąsowa, a na niej miedziane kwiatki*" create a suggestive, almost oneiric image of the interior of the chamber. The sentence structure and the choice of epithets build an atmosphere of mystery and fairy-tale character, which is consistent with the tradition of Russian folk literature. The Polish text maintains dynamic equivalence, conveying not only the content but also the emotional atmosphere of the original.

At the lexical and syntactic level, significant differences can be observed in the English translation. Already in the first sentence, the emphasis on the participation of persons in the plural – "*Stepan saw they were in a huge chamber*" – introduces an additional narrative distance and suggests the presence of other characters, although in the Polish version the focus was placed solely on Stepan's perspective. Another interesting device is the use of the phrase "*the walls were of malachite studded with diamonds*," where the addition of "*studded with*" enriches the visual aspect of the description but at the same time shifts the emphasis from the material of the walls to their ornamentation. It is also worth noting the unusual in English noun + adjective order in the expression "*the roof dark crimson*," which deviates from the natural English word order (crimson roof). This may be a deliberate stylistic choice aimed at preserving the rhythm of the original or giving the text an archaizing tone. Only in the later part of the sentence does the classical order appear: "*with a tinge of black*." Such solutions indicate the use of the strategy of modulation and deliberate transposition, in accordance with Vinay and Darbelnet's classification.

Fragment 2. Description of the stone forest

The second fragment presents a metaphorical image of nature – the description of the so-called "stone forest." It is distinguished by an unusual combination of natural elements with mineral motifs, which creates a fairy-tale and simultaneously oneiric atmosphere. The analysis of this fragment makes it possible to show how translators deal with metaphorics deeply rooted in Russian folklore and symbolism.

Павел Петрович Бажов "Каменный цветок"

Деревья стоят высоченные, только не такие, как в наших лесах, а каменные. Которые мраморные, которые из змеевика-камня… Ну, всякие… Только живые, с сучьями, с листочками. От ветру-то покачиваются и голк дают, как галечками кто подбрасывает. Понизу трава, тоже каменная. Лазоревая, красная… разная… Солнышка не видно, а светло, как перед закатом. Промеж деревьев змейки золотенькие трепыхаются, как пляшут. От них и свет идет.

Бажов Павел "Kamienny kwiat"

Rosną drzewa wysokie, tylko że nie takie, jak w naszych lasach, lecz kamienne. Niektóre marmurowe, niektóre z wężowego kamienia… Wszelakie… I wszystkie żywe, z sieczkami, z listeczkami. Kołyszą się na wietrze, wydają szmer. Dołem – trawa również kamienna: lazurowa, czerwona. Słonka nie widać, lecz jest widno niby przed zachodem. Pomiędzy drzewem śmigają złociutkie wężyki, jakby tańczyły. To od nich bije jasność.

Pavel Bazhov "The Flower of Stone"

All round him were tall, tall trees, but not like the ones in our woods, they were made of stone. Some were marble, some were serpentine – every kind. But they were living trees, with little twigs and leaves. When the wind swayed them there was a sound like when you throw down a handful of pebbles. And underfoot the grass was of stone too, of lapiz lazuli and red stone – all sorts. There was no sun, but the light was like it is just before sunset. In between the trees were golden serpents swaying and twisting as though in some dance. It was from them the light came.

Comparative analysis: Russian original and Polish translation

At the lexico-semantic level, in the Russian original the term „*змеевик-камень*" refers directly to Ural mineralogy, carrying a precise, local meaning. In the Polish translation, „*wężowy kamień*" takes the form of a stylised metaphor, which results in the loss of the mineralogical specificity and authenticity of the term. As a consequence, the Polish reader may interpret this element more as a poetic allusion to serpentine matter than as a real reference to a specific mineral.

Another significant difference concerns the rendering of the colourful comparison „*голк дают, как галечками кто подбрасывает*" – a folk, locally marked image with a clearly audiovisual character. The Polish translation „*wydają szmer*" sounds soft and aesthetically pleasing, yet loses the original metaphor, the force and originality of the image, causing the fragment to lose its vividness and local colour.

On the level of movement dynamics, the way the description of the snakes is rendered is noteworthy: the Russian „*трепыхаются змейки золотенькие*" was translated as

„śmigają złociutkie wężyki." Although the Polish translator preserves rhythm and dynamism, the verb *śmigać* (which suggests rapid, intense motion) introduces a different impression from the Russian *„трепыхаются"*, which refers more to trembling or light flickering.

Stylistically, Bazhov's original employs language that allows one to "dream while awake" – elements of nature are simultaneously stone and alive, and repetitions such as *„каменные… жив*ые" reinforce the paradoxical, magical realism of the described world. In the Polish translation, this fragment sounds smoother and more harmonious, which leads to the loss of the internal tension between what is living and what is non-living, and between stillness and pulsing life.

In summary, the Polish translator introduces shifts that soften the local colour and reduce the ambivalent tensions present in the original. While the Russian text remains deeply rooted in Ural tradition and emphasises the contradictions between nature and its marvellous transformations, the Polish version leans toward a more harmonious and fairy-tale-like mode of representation.

Comparative analysis: The Polish translation and the English translation

In the analysed fragment of *The Stone Flower*, the very first sentence in the English version draws attention through the use of the operator "*All round him,*" which firmly anchors the perspective of the description in the protagonist's experience. In the Polish translation there is no direct equivalent of this construction – the description is more universal and general. Additionally, the use of the operator "*they were made of stone*" in English, although dictated by grammatical requirements, emphasises the stony nature of the trees, whereas the Polish version maintains a more impressionistic tone: "*drzewa wysokie, tylko że nie takie, jak w naszych lasach, lecz kamienne.*"

At the semantic level, the introduction of the term "*serpentine*" in the English translation is particularly noteworthy, as it precisely identifies the type of stone (serpentinite). This solution increases terminological precision, but it was not adopted in the Polish version – perhaps due to the risk of ambiguity ("serpentynowy" in Polish tends to connote decoration rather than mineralogy). The phrase "*every kind*" exemplifies amplification: the translator reinforces the impression of diversity, whereas the Polish version remains laconic. By contrast, the Polish "*I wszystkie żywe*" underscores that each of the listed forms of trees is alive, while the English "*But they were living trees*" introduces a contrast between dead matter and vitality, but does not emphasise this collective aspect as strongly.

Clear differences also appear in the rendering of sound. The Polish description "*kołyszą się na wietrze, wydają szmer*" is general and subtle, whereas the English translator elaborates on this idea, introducing a highly evocative comparison: "*there was a sound like when you throw down a handful of pebbles.*" This technique fits within the strategies of amplification and modulation, making the description more vivid and sensory for an English-speaking reader.

Further distinctions can be found in the depiction of grass and light. The Polish text focuses on colours: "*trawa również kamienna: lazurowa, czerwona,*" while the English translation specifies types of stones: "*lapis lazuli and red stone – all sorts,*" which gives

the fragment an exotic and more concrete quality. With respect to light, the Polish text employs the present tense ("*jest widno niby przed zachodem*"), which adds immediacy to the scene, whereas the English uses the past tense ("*the light was like it is just before sunset*"), consistent with typical narrative conventions in English literature.

At the level of dynamic movement, the Polish description "*śmigają złociutkie wężyki, jakby tańczyły*" is energetic and uses diminutives, whereas the English conveys movement more realistically and in greater detail: "*golden serpents swaying and twisting as though in some dance.*" The phrase "*swaying and twisting*" better captures the characteristic motion of snakes, enhancing the visuality of the scene. The final sentence "*To od nich bije jasność*" is rendered in the English version as "*It was from them the light came,*" which constitutes a faithful equivalence preserving both the sense and the structure of the original.

Fragment 3. The description of a stormy night

The next example is a fragment of a dynamic nature, depicting a violent natural phenomenon – a stormy night. Translating this type of description requires precision in conveying the rhythm of the narration and the intensity of sensations that, in the original language, create an atmosphere of dread and drama. A comparison of the Polish and English versions makes it possible to observe how different literary traditions transpose the emotional charge of the text.

Фёдор Достоевский " Преступление и наказание" выдержка 1

Между тем вечер был душный и мрачный. К десяти часам надвинулись со всех сторон страшные тучи; ударил гром, и дождь хлынул. как водопад. Вода падала не каплями, а целыми струями хлестала на землю.

Fiodor Dostojewski "Zbrodnia i kara" fragment 1

Wieczór był ponury i duszny. O dziesiątej całe niebo było groźnie zachmurzone; uderzył piorun i deszcz lunął, jak wodospad. Woda nie spadała kroplami, lecz całemi strugami zalewała ziemię. Błyskawice połyskiwały co chwila i można było doliczyć do pięciu w ciągu każdego błyśnięcia.

Fyodor Dostoevsky " Crime and Punishment" excerpt 1

It was a dark and stifling evening. Threatening storm-clouds came over the sky about ten o'clock. There was a clap of thunder, and the rain came down like a waterfall. The water fell not in drops, but beat on the earth in streams. There were flashes of lightning every minute and each flash lasted while one could count five.

Comparative analysis: The Russian original and the Polish translation

At the lexical–stylistic level, both versions of the text create an overwhelming, tense atmosphere, expressed in the Russian original through the phrases "*душный и мрачный,*" and in the Polish translation through "*ponury i duszny.*" The description of the rain in the original is reinforced by strong, expressive verbs such as "*hlynul*" and "*chlestala,*" which emphasize the violence and intensity of the downpour. In the Polish translation, a similar construction is used "*lunął jak wodospad… zalewała ziemię*" yet these verbs, although expressive, do not achieve as sharp or as dynamic an effect as in the original.

It is worth noting the additional insertion in the Polish text: the description "*Błyskawice połyskiwały… można było doliczyć do pięciu*" does not appear in the Russian original. This translational intervention strengthens the visual effect and gives the scene a cinematic quality; however, at the same time, it disrupts the precision of the author's description by introducing a degree of dynamism and rhythm that is absent from the source text.

In summary, the Polish translation largely preserves the structure and atmosphere of the original, yet through additional stylistic devices it shifts the emphasis toward a more spectacular and dramatic depiction of the storm. While the Russian text presents it as an overwhelming and inevitable force of nature, the Polish version lends the scene more dramatic and evocative qualities.

Comparative analysis: The Polish translation and the English translation

At the level of sentence structure, the first sentence of both versions – the Polish and the English – preserves essentially the same meaning, although the order of elements differs. The Polish text *„Wieczór był ponury i duszny"* and the English *"It was a dark and stifling evening"* are natural and typical constructions for both languages, effectively introducing the reader to the gloomy mood of the scene being described. Both versions employ a simple sentence structure, which underscores the universality and clarity of the message.

In terms of narrative dynamics, greater differences appear in the weather description in the following sentence. In the Polish version *„O dziesiątej całe niebo było groźnie zachmurzone; uderzył piorun i deszcz lunął, jak wodospad"* we encounter one long, complex sentence that naturally links the atmospheric conditions with the violent weather phenomenon. In the English translation, the sentence is divided into two: *"Threatening storm-clouds came over the sky about ten o'clock. There was a clap of thunder, and the rain came down like a waterfall."* Such a division is typical of English narrative style and gives the text greater clarity and rhythm. Furthermore, the different placement of the time reference ("*o dziesiątej*" at the beginning in Polish and "about ten o'clock" at the end of the first English sentence) influences how the chronology of events is perceived by the reader.

Regarding verbal aspect, the Polish phrase *„było groźnie zachmurzone"* indicates a completed state by that hour, the sky was already stormy. In contrast, the English *"Threatening storm-clouds came over"* emphasizes the moment when the storm clouds arrived, lending the narrative greater dynamism and a sense of movement. This solution may be interpreted as an example of modulation, which shifts the temporal and aspectual perspective of the event.

In terms of imagery and lexis, the differences are particularly visible in the description of the rain. The Polish text *„Woda nie spadała kroplami, lecz całemi strugami zalewała ziemię"* has an archaic and poetic character, and the phrase *„całemi strugami"* highlights the intensity of the rainfall in a vivid yet static way. The English equivalent *"The water fell not in drops, but beat on the earth in streams"* is more dynamic thanks to the verb "beat," which suggests the force and rhythm of the falling rain. The use of "streams" instead of the more metaphorical "*strugami*" introduces a more tangible image, bringing the description closer to dynamic equivalence with elements of modulation.

Temporal and stylistic differences also emerge in the description of the lightning. The Polish „*Błyskawice połyskiwały co chwila i można było doliczyć do pięciu w ciągu każdego błyśnięcia*" is more general and subjective, whereas the English *"There were flashes of lightning every minute and each flash lasted while one could count five"* suggests regularity and a precise rhythm. Both translations employ constructions natural to their respective languages, which reflects the translator's concern for idiomaticity and fluency. The difference therefore lies in the degree of formality: the Polish description has a more impressionistic character, while the English one is more precise and formal.

Fragment 4. Description of the old woman

The final analysed fragment is a character description – that of an elderly woman with a small frame and distinctive facial features. This is an example in which the translator must make lexical and stylistic choices that directly influence how the reader envisions the character. The analysis of this fragment demonstrates how differences in translation can shape not only specific physiognomic details, but also the overall impression and emotional reception of the character.

Фёдор Достоевский " Преступление и наказание" выдержка 2

Это была крошечная сухая старушонка, лет шестидесяти, с вострыми и злыми глазками, с маленьким вострым носом и простоволосая. Белобрысые, мало поседевшие волосы ее были жирно смазаны маслом. На ее тонкой и длинной шее, похожей на куриную ногу, было наверчено какое-то фланелевое тряпье, а на плечах несмотря на жару, болталась вся истрепанная и пожелетелая меховая кацавейка.

Fiodor Dostojewski "Zbrodnia i kara" fragment 2

Była to drobniutka, sucha starowinka, wieku jakichś sześćdziesięciu lat, z ostrymi złymi oczkami, z malutkim, spiczastym nosem, bez chustki na głowie. Płowe, ledwie siwizną przypruszone włosy były tłusto nasmarowane olejem. Cienka i długa szyja, podobna do kurzej łapki, była omotana jakimiś flanelowymi gałgankami, a z ramion, mimo upału, zwisała zniszczona i pożółkła salopka na futrze.

Fyodor Dostoevsky " Crime and Punishment" excerpt 2

She was a diminutive, withered up old woman of sixty, with sharp malignant eyes and a sharp little nose. Her colourless, somewhat grizzled hair was thickly smeared with oil, and she wore no kerchief over it. Round her thin long neck, which looked like a hen's leg, was knotted some sort of flannel rag, and, in spite of the heat, there hung flapping on her shoulders, a mangy fur cape, yellow with age.

Comparative analysis: Russian original and Polish translation

At the lexical level, in the description of the elderly woman, the Russian expression "*крошечная сухая старушонка*" is faithfully rendered as "*drobniutka, sucha staro-winka*," which constitutes an accurate reflection of the original. The phrase "*вострые и злые глазки*" is translated as "*ostre, złe oczka*" despite minimal differences in emotional intensity, the Polish language does not possess equally strong expressive force in diminutive forms, yet the meaning remains preserved. A noteworthy semantic shift occurs

in the translation of the word "*белобрысые*" as "*płowe*": the Russian term carries a rougher, slightly disparaging connotation, associated with the pale-straw colour of the hair of common folk, whereas the Polish "*płowe*" is a softer and more neutral designation.

The metaphorical comparison "*куриная нога*" – "*kurza łapka*" is retained, and in Polish it functions as a physiologically unpleasant image. However, the translation of the colloquial, folk term "*меховая кацавейка*" as "*salopka na futrze*" is particularly significant: "*кацавейка*" carries a strong connotation of colloquialness and poverty, while "*salopka*" is a literary and archaic term, which affects the visualisation of the character and shifts her portrayal toward a more neutral register.

In summary, the Polish translation conveys the overall meaning of the original faithfully, but in several places it softens the expression and harshness of the Russian description. These differences concern primarily emotional colouring and linguistic register, which makes the character appear less repulsive and more rooted in a literary rather than colloquial style in the Polish version.

Comparative analysis: Polish translation and English translation

At the level of lexis and emotional colouring, differences can be observed between the expressions used in the Polish and English translations. The Polish term "*starowinka*" has a poetic quality and conveys a subtle tone; it suggests a small, perhaps even somewhat endearing elderly woman, evoking associations with a grandmother or a familiar figure. The English version uses the phrase "withered up old woman," which is more literal and more harshly connoted, emphasising the physical signs of age and frailty. This difference influences the reader's emotional stance; the Polish reader may feel greater empathy or warmth, whereas the English-speaking reader perceives the character more directly and realistically.

In terms of the construction of age and sentence segmentation, differing solutions also appear. The Polish "*w wieku jakich sześćdziesięciu lat*" is more elaborate and poetic, while the English "of sixty" sounds simple and concise. Sentence segmentation likewise differs between the versions; in the Polish text the phrase "*bez chustki na głowie*" appears at the end of the first sentence, whereas in the English translation it is moved to the end of the next sentence, which alters the rhythm and fluidity of the narration.

The description of the hair in both versions shows further subtle shifts. The Polish text "*Płowe, ledwie siwizną przypruszone włosy były tłusto nasmarowane olejem*" features the vivid term "*płowe*" and the addition "*ledwie siwizną przypruszone*," creating an image of light hair with a slight grey sheen. The English equivalent "*Her colourless, somewhat grizzled hair was thickly smeared with oil*" is more neutral – it highlights rather the lack of colour and signs of fatigue than the warmth of the shade. Both translations consistently emphasise the greasiness of the hair, rendering it through "*tłusto nasmarowane olejem*" and "*thickly smeared with oil*."

The final sentence concerning the neck and clothing differs in detail and stylistic colouring. In the Polish text – "*Cienka i długa szyja, podobna do kurzej łapki, była omotana jakimś flanelowymi gałgankami, a z ramion, mimo upału, zwisała zniszczona i pożółkła salopka na futrze*" – we find the image of a thin, frail figure, with the details of clothing

presented in a visual yet neutral manner. The English translation expands the description: "*Round her thin long neck, which looked like a hen's leg, was knotted some sort of flannel rag, and, in spite of the heat, there hung flapping on her shoulders, a mangy fur cape, yellow with age*." The addition of the adjectives "*flapping*," "*mangy*," and "*yellow with age*" enhances the visual vividness and dynamism, while also introducing more strongly negative connotations. Sentence segmentation in the English version is more complex, yet remains clear through the use of commas and conjunctions.

Conclusions from the entire translation analysis

A comparative analysis of the Polish and English translations of selected excerpts from Russian literature reveals significant differences at the lexical, syntactic, and stylistic levels, resulting both from the translators' differing strategies and from the linguistic characteristics of the two target languages. The Polish versions are marked by a more frequent use of dynamic equivalence, which manifests in the preservation of metaphorical, poetic tones and an impressionistic quality of description. In contrast, the English translations more often employ formal equivalence, enriching the text through amplification, modulation, and precise detail, as well as dividing longer sentences into shorter ones – all of which contributes to clarity and rhythmic narration. This approach results in a more realistic and dynamic perception of the text.

At the lexical level, the English translations often introduce additional elements that do not always have a direct equivalent in the Polish text, such as "*studded with*," "*every kind*," "*beat on the earth*," or "*mangy*." These differences are not errors but rather deliberate translational choices made to adapt the content to the linguistic norms and expectations of the target audience. Syntactic differences – including temporal shifts or sentence segmentation – likewise influence the narrative dynamics and shape how the reader experiences the described scenes.

From the perspective of equivalence theory and Vinay and Darbelnet's translation strategies, these differences may be interpreted as reflections of distinct cultural and linguistic priorities. In Polish culture – strongly shaped by the traditions of Romanticism and folk literature – greater emphasis is placed on mood, symbolism, and the emotional dimension of the text. In Anglophone culture, however, precision, clarity, and detail are preferred, which translates into more literal and richly elaborated descriptions. Such translational choices may therefore reflect different cultural perceptions and interpretative tendencies among speakers of each language.

In the context of the experimental study combining textual analysis with AI-generated illustrations, these subtle differences take on particular significance. AI systems interpret descriptions and atmospheres directly from the text, meaning that even slight stylistic, lexical, or syntactic shifts can result in different visual outputs. The Polish text – due to its metaphorical and poetic character – may encourage algorithms to generate more symbolic, atmospheric, and emotionally charged images. Meanwhile, the English version, with its precise and detailed descriptions, may produce illustrations that are more realistic, intricate, and dynamic. In this way, the language of translation influences not only the literary reception of the text but also its visual representation.

To conclude, the analysis demonstrates that even seemingly minor differences between translations may reflect deeper cultural and perceptual distinctions that shape how users of different languages process and interpret literary texts and their associated imagery. These findings may have meaningful implications for fields such as translation studies, intercultural education, and the development of AI tools for generating visual and textual content.

Generated illustrations

After completing the linguistic and translational analysis, the next stage of the study involved comparing its findings with the illustrations generated by artificial intelligence. This section of the article presents the images created on the basis of selected excerpts from Russian literature in their original versions as well as in translation.

Each illustration is accompanied by a brief commentary indicating how the differences between the source and target texts are reflected in the visualizations. Such a comparative approach makes it possible to trace how translational shifts influence not only the reader's reception but also the way artificial intelligence interprets and materializes literary imagery.

Russian   Polish   English

Figure 1. Description of the chamber

The visualization based on the Russian original presents a more subdued interior, furnished with laconic pieces such as a bed, two stools, and a table. The copper elements are rendered realistically, without excessive ornamentation, and the ceiling appears muted, with a subtle allusion to floral motifs but without any strong gleam. The protagonist, Stepan, is depicted as young, full of astonishment, and positioned close to the viewer.

In the case of the Polish translation, the interior adopts features of Baroque opulence: the forms of the bed, cabinets, and tables are elaborate, and the copper elements resemble

inlays of precious stones. Diamonds create patterns on the walls reminiscent of luxurious embellishments, while the ceiling becomes bright and richly decorated, with a clearly exaggerated floral ornament. The figure of Stefan is shown as older, often turned away from the viewer, which increases the distance between the protagonist and the observer.

The illustration generated on the basis of the English translation differs markedly from the other two. The room's décor resembles an elegant sitting room rather than a bedroom, and the space itself is noticeably smaller and more intimate. It lacks both the figure of Stepan and the bed present in the previous visualizations. The impression of an exclusive alcove – at times even resembling a bar-like niche – can be linked to the use of the plural form "they" in the English text, which shifts the interpretation of the scene toward a less private, more communal space.

| Russian | Polish | English |

Figure 2. Description of the stone forest

The visualization based on the Russian original presents the trees as tall and majestic, with a distinct marble and serpentine pattern. The trunks are massive and immobile, and the light has a soft, sunset-like quality, gently dispersing in the background. Golden lines ripple subtly like fireflies, creating a restrained sense of magic. The stone grass is rendered in both cool and warm tones, and the entire landscape appears monumental and mysterious.

In the Polish translation, the trees acquire greater elegance and plasticity – especially those "made of serpentine stone," which take on a nearly twisting, snake-like form. The light emitted by the "tiny golden serpents" is more intense and dynamic, and the stone grass assumes vivid red and blue hues, enriched with decorative, lighter accents. The entire scene gains a more fairy-tale and picturesque character, visually approaching the aesthetics of fantasy.

The English version differs from the other two primarily in its depiction of the snakes' movement: they seem to rise vertically from the ground, whereas in the Russian and Polish texts they "dance" mainly among the treetops. The bark of the trees is noticeably more

stone-like than in the other versions, and the trunks – similarly to the Russian visualization – remain straight, lacking the serpentine deformations present in the Polish version. The grass, meanwhile, appears as clusters of colorful tufts, which is a unique element absent from the remaining illustrations.

Russian	Polish	English

Figure 3. Description of the stormy night

The illustration based on the Russian original depicts a stormy night with dense rain falling in vertical streams. It is dominated by a single lightning bolt and dimmed light, while nature appears as an overwhelming, elemental force. The vertical currents of water and light intensify the feeling of claustrophobia and enclosure, and the water striking the ground reinforces the atmosphere of hopelessness and the protagonist's inner tension.

In the case of the Polish translation, the scene is visually more elaborate. The presence of two lightning bolts heightens the dramatic effect, and the landscape appears open, with a clearly defined horizon and vegetation in the background. The perspective is elongated, the light is brighter, and the entire scene acquires greater dynamism, resembling a cinematic drama rather than an intimate, internal monologue.

The illustration generated on the basis of the English translation turns out to be closest to the Polish version in terms of color palette, which is cooler in tone than the Russian variant. However, it is dominated by a single lightning bolt descending vertically in the center of the composition. The overall image is significantly darker than in the remaining versions, which enhances the impression of gloom and makes the rain streaks less visible. The contrast between the flash of lightning and the dark clouds thus becomes exceptionally sharp, and its light strongly reflects off the water's surface, giving the scene a dramatic intensity.

Russian	Polish	English

Figure 4. Description of the old woman

Based on the Russian text, the old woman appears as a threatening, stern, almost demonic figure – with a distinctly furrowed brow and narrowed, malicious eyes. Her clothing is visibly worn, the collar is dirty, and the fur is deformed. Cooler colours dominate, along with a neutral background that emphasizes the portrait-like rigidity and distance from the viewer.

In the Polish translation, the image of the character becomes softened – her gaze is alert but less malevolent. The clothes, though old, appear tidier, and the fabric of the *salopka* shows no clear signs of heavy wear. Overall, the illustration creates a more realistic, portrait-like representation, devoid of the caricature-like or demonic effect.

The English version presents the figure frontally, which clearly distinguishes it from the other two visualizations, where the character is shown at an angle. In this version, the old woman's face has a harsh, threatening expression, closer to the Russian original than to the softened Polish depiction. A noticeable detail is also the darkest hair among all versions, and the scarf tied under her neck resembles the one in the Russian original. The clothing remains very dark, which makes signs of wear less visible than in the other illustrations.

Summary: Comparison of the generated images

The comparison of visualizations based on the Russian originals and their Polish and English translations demonstrates that even subtle lexical, stylistic, and cultural differences can lead to significant shifts in how artificial intelligence interprets and materialises a literary text.

The illustrations generated from the Russian texts are characterised by greater restraint and a more symbolic dimension. The colour palette is muted, and the details are minimal, reflecting cultural and mythological contexts as well as the atmosphere of fairy-tale or

realist prose. The Polish translation in many cases shifts the emphasis towards ornamentation and vividness – the images are richer, more detailed, and often more fairy-tale-like, which corresponds to the literary and elevated tone of the translations and a tendency toward modulation or amplification. The English versions, in turn, are marked by greater precision and a drive for clarity of depiction. At times they produce visualizations that are more realistic or neutral, and at other times they introduce new elements – such as a different movement of the snakes or a reinterpreted type of room – resulting from distinct translational choices and conventions of the target language.

A comparison of all three versions therefore shows that language not only shapes the reception of a literary fragment but also directly influences the visualisation generated by AI. The Russian original brings restrained magic and symbolism; the Polish version adds ornamentation and expressiveness; and the English one contributes precision, clarity, or further reinterpretation. Taken together, this demonstrates that artificial intelligence, as a research tool, makes it possible to capture differences that may be difficult to discern solely through linguistic analysis, opening new possibilities for interdisciplinary studies at the intersection of literary scholarship, translation studies, and digital technologies.

Survey study

The aim of the survey study was to examine whether the language of the prompt influences the visual preferences of Polish-speaking participants. The respondents, all users of the Polish language, read literary fragments translated into their mother tongue and subsequently selected the illustration which, in their view, best reflected the content and atmosphere of the scene. The images differed solely in the language of the prompt used to generate them (Russian, Polish, or English).

Detailed information concerning the selection of material and the research procedure is provided in the methodological section. In the present section, we focus exclusively on the results and their interpretation.

The study encompassed 880 individual decisions (220 respondents × 4 fragments). Each choice concerned one of the three illustrations generated from a prompt in Russian, Polish, or English. Based on these responses, the frequency of selections for each option was calculated, along with the proportion of choices favouring the illustration generated from the Polish prompt.

Table 1. Choices of illustrations depending on the prompt language

Fragment	Option ⇒ prompt language	Choice of PL-prompt (n)	Proportion PL
1 (Bazhov, "The Mistress of the Copper Mountain")	1 = RU · 2 = EN · **3 = PL**	**187 / 220**	**0,850**
2 (Bazhov, "The Stone Flower")	1 = EN · 2 = RU · **3 = PL**	**91 / 220**	0,414
3 (Dostoevsky #1)	1 = EN · **2 = PL** · 3 = RU	**96 / 220**	0,436
4 (Dostoevsky #2)	**1 = PL** · 2 = RU · 3 = EN	**88 / 220**	0,400
Total (880 responses)	–	**462 / 880**	**0,525**

At the descriptive level, clear differences can be observed between the fragments. In the case of the first fragment (*"The Mistress of the Copper Mountain"*), as many as 85% of participants (187/220) selected the illustration generated from the Polish prompt. In the remaining three fragments, the dominance of this option was smaller and amounted to 41% (*"The Stone Flower"*), 44% (Dostoevsky fragment 3), and 40% (Dostoevsky fragment 4). Overall, across the entire experiment, the proportion of choices for illustrations generated from the Polish prompt reached 52.5% (462/880), which suggests a substantial deviation from the expected value under random choice (33.3%).

The results clearly indicate that the prompt language was a significant factor shaping the visual preferences of Polish-speaking respondents. Overall, illustrations generated from the Polish text were selected in 52.5% of cases (462 out of 880 decisions), a value substantially higher than the expected 33.3% under random choice. This finding supports the existence of a "visualizing in one's own language" effect, consistent with the concept of the linguistic worldview: our imagination and visual perception are strongly rooted in the native linguistic code.

However, the strength of this effect varied depending on the fragment. The most striking result was observed for the first fragment from Bazhov's *"The Mistress of the Copper Mountain"*, where 85% of participants selected the illustration based on the Polish prompt. This suggests that texts deeply embedded in cultural tradition may particularly reinforce the mechanism of identification with one's own language.

In the remaining fragments, the dominance of the Polish prompt was moderate (40–44%). For Bazhov's *"The Stone Flower"*, the proportion of choices reached 41%, which may indicate that the aesthetic or compositional qualities of the image played a more significant role than the prompt language itself. Even more intriguing are the results for the fragments from Dostoevsky's *"Crime and Punishment"*: in one case, the illustration from the Polish prompt received 44% of the selections, while in the other – 40%. Notably, in the third fragment, the highest proportion of choices (48.6%) went to the illustration generated from the Russian prompt, which may be interpreted as an effect of the universality and emotional intensity of Dostoevsky's prose, resonating more strongly with the original language.

Additional analysis – respondents' age

The aim of the additional analysis was to examine whether preferences for illustrations generated from the Polish prompt varied across age groups. This question was motivated by the hypothesis that the way literary content is conceptualized – and visually interpreted – may differ across generations.

The analysis included 219 respondents who indicated belonging to one of six age groups, yielding a total of 876 decisions (four picture selections per person). The dependent variable was a binary category: "selection of an illustration generated from the Polish prompt" (1 = selection of the "native-language" illustration; 0 = all other choices).

Descriptive statistics showed that in the three main age groups (21–50 years, accounting for 96% of all decisions), the proportion of "native-language" selections ranged from 47% to 54%, with an overall value of 53% for the entire sample. The highest proportion was observed in the ≤ 20 age group (75%), but this result was based on a very small number of observations (n = 16), which substantially limits its reliability.

The absence of an age effect indicates that the preference for illustrations generated from the Polish prompt was similar across all age groups. The effect therefore appears to be cross-generational in nature. However, it must be emphasized that the youngest and oldest age groups were very small in size, which makes their estimates unstable and non-representative.

The lack of an age-related effect suggests that the primary preference for illustrations generated from the native-language prompt is a transgenerational phenomenon – it remains consistent among both younger and older adults. Nevertheless, future replications should aim for a more balanced sample and should also control for potential mediating factors (e.g., cultural exposure, multilingual competence) to more precisely identify the mechanisms underlying the preference for "national language" in visual interpretation.

Limitations and directions for future research

Although the study presented here made it possible to capture a clear effect of visual preferences associated with the language of the prompt, it also has several limitations. First, the sample included only Polish-speaking participants, which restricts the generalizability of the findings to other linguistic groups. Future research should therefore conduct analogous experiments among Russian- and English-speaking audiences to determine whether the phenomenon of "imagining in one's own language" is universal.

Another limitation concerns the selection of literary fragments, which was intentionally restricted to the works of Pavel Bazhov and Fyodor Dostoevsky. While this choice was appropriate for the interdisciplinary nature of the project and allowed for a focus on culturally grounded descriptions, the results may be specific to these authors and their stylistic conventions. Expanding the study to include a broader repertoire of texts – both classical and contemporary – would allow for a more precise delineation of the scope of the phenomenon.

A further important limitation relates to the technology itself. The study used illustrations generated by specific AI tools (ChatGPT and Sora). Each system relies on its own algorithms and training data, which may have influenced the final output. Future research should compare results obtained using different generative models to assess the extent to which the observed effects depend on the language of the prompt versus the specific tool used for image generation.

Finally, the study was descriptive in nature and focused on participants' choices within a survey context. Qualitative follow-up studies – such as in-depth interviews – could provide valuable insights into respondents' motivations, as well as the role of aesthetic and cultural factors in the evaluation of illustrations.

In sum, the findings confirm the importance of one's native language in shaping the visual perception of literary text, while simultaneously opening avenues for further research on the relationship between language, translation, artificial intelligence, and the imagination of the reader. Deepening these analyses could contribute not only to literary studies and translation studies, but also to research in digital culture and the digital humanities.

Conclusion

The study demonstrated that combining literary translation analysis with AI-generated visualizations offers a new way to capture the relationships between language, culture, and reader perception. The analysis of examples drawn from the works of Pavel Bazhov and Fyodor Dostoevsky revealed that even subtle differences in translation lead to stylistic, semantic, and cultural shifts, which are subsequently reflected in the images produced by AI models.

The results of the survey confirmed that respondents more frequently selected illustrations generated from Polish prompts, a finding that can be interpreted as an instance of "imagining in one's own language" and as empirical support for the concept of the linguistic worldview. This phenomenon proved to be statistically significant and relatively stable across different age groups, indicating its general and transgenerational character.

The article thus highlights that language – with its specific categories and connotations – shapes not only the interpretation of literary texts but also the visualizations and modes of reception of digitally generated images. The integration of translation studies methodologies with artificial intelligence technologies opens new perspectives for interdisciplinary research in which the humanities and technology complement one another, enriching our understanding of the role of language in shaping and transforming mental imagery.

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