

Miriam Kobierski

University of Łódź

AI THE CREATOR?

ANALYSING PROSE AND POETRY CREATED BY ARTIFICIAL INTELLIGENCE

Keywords: artificial intelligence, text, poem, poetry, authentic

Introduction

In the times of the increasing use of technology it should come as no surprise that, eventually, people would try to create a machine that could surpass human abilities. Although initially this super-computer was mainly designed for machine-learning capabilities, data processing, and problem-solving algorithms, over time scientists and programmers have developed more and more uses for the super-computer, resulting in the creation of Artificial Intelligence (AI). As stated by Margaret Boden, “artificial intelligence (AI) seeks to make computers do the sorts of things that minds can do” (1). Therefore, the main objective of artificial intelligence is to resemble the human mind as accurately as possible. Although AI is already sophisticated enough to complete mechanical and computerised tasks, their abilities to convey emotions and feelings and replicate the inner workings of human consciousness are still being developed. Humans have the ability to express their emotions and thoughts through art, such as paintings, sculptures, music and literature, including both prose and poetry. The intelligent systems are only starting to create poetry; however, they have made considerable breakthroughs in language processing and communication.

The aim of this article is to examine short literary texts, predominantly poems, produced by Artificial Intelligence. A linguistic analysis of the individual texts

will be conducted, as well as a comparison between the texts themselves. I also describe an experiment in which I asked a group of participants to determine whether the presented text has been written by a human writer or artificial intelligence in order to examine if the intelligent systems are able to pass as human writers. Native speakers of the English language were asked to partake in this experiment so as to determine whether this would be a determining factor when distinguishing whether a text has been written by AI or a human. Furthermore, the positions in the discussion whether AI poetry can be considered authentic shall be examined.

AI technology

Text generators have become the basis for AI writing. According to Mike Sharples and Rafael Pérez, “computers can now write original short stories, stories that can entertain and persuade others” (xi). When provided the input in the form of a sentence, a couple of phrases or even a photo, the intelligent system can produce whole paragraphs of text. With the amount of input text growing every day, these systems are becoming more and more competent in producing meaningful sequences of speech. The user generated content tool can produce texts covering a variety of topics. Such topics include scientific and academic content as well as poetry, short stories, and other texts focused on triggering emotional response in the reader.

Google has released a new AI tool—ChatGPT. Created by OpenAI, ChatGPT allows users to have human-like conversations with the chatbot, ask for assistance with writing essays, play games like tic-tac-toe, and even write song lyrics. The user simply inserts the input on the basis of which the chatbot is able to produce meaningful content. The program was released in late November 2022 and garnered a lot of attention online. People can use this technology for “composing essays, emails and poems, writing and debugging code, and even passing exams” (Ortiz). Because of the development of research in this area, the model is closer to correctly and accurately replicating human speech. As stated

in an article published by The Washington Post, ChatGPT is a project which attempts to “make ‘talking’ with an AI feel smooth and natural, almost like a conversation between humans would” (Lerman & Verma).

Another example of an AI text generator is called Free AI Writer and Text Generator developed by Smodin LLC. The abilities of this text generator are similar to those of ChatGPT, as once again all that is needed is a prompt from the user for the system to write an essay or an article. AI Writer can also be used for copywriting and marketing, as it allows the users to generate marketing content for ads and posts on social media. Another user generated tool is called Text Generation API, created by DeepAI. According to its creators, this system is “backed by a large-scale unsupervised language model” (DeepAI) and is based on the model GPT-2, meaning that it has a larger database as well as similar programming to the previously mentioned model.

Linguistic analysis

For the purpose of the study discussed in this article, the same prompt was input in two generators: Free AI Writer and Text Generation API. Next, the texts were analysed and compared, both from linguistic and literary standpoint. Particular attention was paid to the naturalness of the text (i.e. whether it resembles texts produced by humans) and its emotional value and impact on the reader. The prompt for examining their ability to replicate expressing emotions was the same for all of the generators—*and on her cheek lay a kiss from him, the sincerest look of deep love she had ever seen. At this the thought crossed her mind.* The Smodin AI writer generated the following text:

And on her cheek lay a kiss from him, the sincerest look of deep love she had ever seen. At this the thought crossed her mind. Could he mean it? Could he be serious about marrying her? She looked at his face and knew that in time to come she would always see there the same tender smile which seemed the answer to her question when they stood together on their first evening by the sea, and which now was the seal of love's faithfulness for her from which she dared not shrink in fear or doubt of its constancy; but with it came also a feeling of wonder as though something

new had dawned upon her, as if, after all, he loved her after only such a short acquaintance. (Smodin)

The text comprises 130 words, with the average number of words in a sentence being 26—this is mainly due to the extremely long phrasing of the second half of the fragment. This particular sentence consists of 93 words and the limited use of punctuation marks makes it quite difficult to follow. The text includes 21 nouns, 23 verbs, and 8 adverbs. The most frequently occurring words are “could,” “after,” and “cheek.”

The phrase “seal of love’s faithfulness” is an interesting choice as it employs alliteration, repeating the same /s/ sound as in sea. Often associated with poetic texts, this device introduces a sense of rhythm into the text. Overall, the intelligent system is able to effectively present a love story and convey the doubts of a new love, especially when the two people do not know each other very well. However, some phrasings do not seem to be used in the correct way, such as “which seemed the answer to her question when they stood together,” which, in turn, disturbs the understanding of the text. By not including any names of the characters, the reader might not form a strong connection with them; on the other hand, by including so many pronouns (20 in total), the reader may have the feeling that they already know these people and do not actually need an introduction. Although the logical sense of the text is incoherent at times, the system was able to present the multitude of feelings that one feels when in love: wonder, doubt, being at peace and the sense of security upon seeing the tender smile of a loved one.

The same prompt was given to the second generator, Text Generation API, which produced the following text:

And on her cheek lay a kiss from him, the sincerest look of deep love she had ever seen. At this the thought crossed her mind. She had no hope of a night like this and the more he talked of it, the deeper and the more he thought of being unable to resist. And she knew she must die, and a night like this would end with no luck—a nightmare of misery and pain, an agony of sorrow, in which there would be no relief. It was over. He pulled

her to herself, and her eyes opened wide with a burning lust. He gave her a hard kiss, and as he did so she thought she had more than enough. She felt a touch of her own blood running down her chin against his arms. She leaned forward with such a weight that the hand he had rested over her neck didn't even bother to hold her. He lay his hand on her hand, and she grasped it without thinking for a moment. Her heart sped up with a new idea—that this man had no friends at all—and she realized he would never be there for her again. The last thought she had left her, she began to remember. But when she did, suddenly at the touch of her hand as she stared out to the stars, a storm of grief rose to the surface of her thoughts. She lost all control of her body, and began to cry, the pain building on her. But no-one had ever loved her like this. (Text Generation API)

The text consists of 266 words including 45 nouns, 49 verbs, and 13 conjunctions (the most frequently used conjunction being “and”). The most frequently occurring words were “thought,” “hand,” “more,” and “kiss.” On average the AI used 18 words per sentence. A study conducted in 1986 showed that more experienced users of language (graduate students) had a tendency of using 10 to 12 words per sentence in writing in contrast with less experienced language users (undergraduates) who used five to six words in a sentence (Kaufer et al.). Taking into account both children and adult speakers, the Plain Language Association InterNational has stated that people usually use between 15 and 20 words per sentence on average (Plain Language Association InterNational).

What can be noticed about this extract are the strong word expressions, such as “agony of sorrow,” “a hard kiss,” “a storm of grief,” and “a nightmare of misery and pain.” These expressions contribute to the negative tone of the text as these lexical items are associated with pain, darkness, fear, and suffering. The motif of suffering can be further seen when one of the characters begins to cry with the “pain building on her” and blood appears on her face caused by the kiss of her lover. Some of the expressions found in the text are either incorrect or unusual. For example, in “he pulled her to herself” the pronouns are used incorrectly. Another peculiar expression is “she felt a touch of her own blood.” A human writer would probably say that she felt her own blood running down her face.

The generator indicates feelings of passion between two people with expressions such as “burning lust,” “hard kiss,” “unable to resist,” and the notion

of a heart speeding up. But although these burning feelings of passion are present, the couple is not able to overcome their difficulties. She knew that the night would end and that after this last time she would not see her beloved again. She was aware that after this night she would be flooded with grief and feelings of despair and hopelessness.

Text Generation API took a different approach to Free AI Writer by portraying the harsh reality of losing a loved one. The tone of this extract is darker than the previous one which is achieved by evoking images of blood and pain. Furthermore, even the story is much more depressing in tone as it depicts two lovers who are not able to create a healthy relationship and must part ways. The first extract leaves the readers with a feeling of hope, while the second one floods them with despair caused by the loss of a loved one.

In order to showcase the difference between human writing and AI-generated text, I will also analyse a paragraph written by Mandy Kloppers titled “My world feels dark when you’re not here.” The text is as follows:

My world feels dark when you’re not here. Even when I’m out under a cloudless sky, it feels like there’s a haze over everything. Before you, the world was filled with so many lights, street lights, stars, the moon, and the sun. Now it feels like you are the brightest light in my life. It would explain why I feel so warm around you, how you provide me with energy and the strength to persevere through my darkest hours. You also shine brilliantly enough that I know I’ll always be able to find my way back to you.
(Kloppers)

The total number of words is 98, with the average number of words in a sentence being 17—similarly to the amount of words on average produced by Text Generation API. The text comprises 14 nouns, 15 verbs and verb phrases, as well as 10 adverbs. The text generated by AI had more verbs and nouns than this paragraph. This writing portrays a strong connection between the speaker and the person they are addressing, using phrases such as “shine brilliantly” and “brightest light in my life” to personify the addressee as a source of warmth and light. The author uses light as a metaphor to illustrate the inspiring and

empowering influence as well as the emotional brightness of their loved one. The use of various sources of light, such as street lights, stars, and the sun symbolise how the mentioned elements used to illuminate the speaker's world; the addressee being described as the "brightest light" implies that they play a central role in the speaker's life. Similarly, to the text generated by the Smodin AI writer, this text portrays a positive description of a loved one and evokes feelings of hope and peace.

Experiment

Although researchers have made a considerable breakthrough in the field of AI communication, there is still the question whether such content may be considered authentic and if texts created by artificial intelligence could pass as texts written by humans. In order to test this hypothesis, a small scale experiment was conducted in 2022. The chosen study method was qualitative research because an in-depth analysis would provide more insights to understand why the participants made their choices. The participants of this study each received the same set of extracts. The sets contained fragments produced by artificial intelligence and human writers. After gathering all of the data, the results were calculated and I created tables in which I presented the collected data. I then analysed the stated reasons for the justifications of the participants of this study. During the experiment, 30 participants were asked to determine whether the two presented texts—titled "And on her cheek lay a kiss from him..." written by the Text Generation API writer and a paragraph discussing the theme of love entitled "My world feels dark when you're not here" authored by Mandy Kloppers—were written by an intelligent system or a human writer. Furthermore, the respondents were asked to provide justifications for their answers as well as indicate which grammatical or lexical items influenced their decision. The participants were divided into three groups. The first group consisted of 5 English native speakers, 2 women and 3 men. This group was specifically chosen to determine whether they would be more proficient in

distinguishing which set of texts has been produced by artificial intelligence than speakers of English as a foreign language. It can be assumed that native speakers are more sensitive to the style of language, more accustomed to naturally occurring language, and more familiar with its nuances. The second group consisted of ten university students, 5 men and 5 women, for whom English is a second language. These participants have a very good command and understanding of this language due to having actively used it on a daily basis as English students. The third and final group consisted of 15 people with language knowledge on intermediate or upper-intermediate level (B1 or B1+). These people can speak English, have contact with this language on a regular or semi-regular basis, but would not be considered fluent speakers. The members of this group were aged between 17 and 25 and were either high schoolers or university students. This group has the weakest connection to English, as the participants of this particular group do not use the language on a daily basis.

The majority of English speakers did not have any difficulty with correctly identifying the first text as having been written by artificial intelligence.

| | Text 1—And on her cheek lay a kiss from him... | Text 2—My world feels dark when you're not here |
|----------------------|---|---|
| Participant 1 | The fact that “no-one” was hyphenated gives me the impression this is a text generated from a source text, like a 19th century romance novel. But from the sentence to sentence, the casual relationships are skewed. | This feels like a coin toss to me. The paragraph traffics in sentiment and the causal links build in a way that is logical—the sort of thing I can easily imagine somebody writing to their beloved. But it’s also full of enough stock images and feelings, that I’m skeptical of its humanness. |
| Participant 2 | There were some pronoun errors which is common in AI and phrases common from old literature as if the program was trained on old books. | The linking between sentiment and first-person feeling makes me think it’s a human. |

| | Text 1—And on her cheek lay a kiss from him... | Text 2—My world feels dark when you're not here |
|----------------------|--|--|
| Participant 3 | Odd phrasing, it's also using wrong grammar tenses, for example: "He lay his hand on her hand" and it mostly feels like a teenager is writing it, it just looks weird. | An AI machine could try to recreate love poems, but they'll never feel as lively or romantic as one a human could've written. |
| Participant 4 | Some sentences did not make any sense—the subject does not always agree with the object. The content of this extract is clear but the language aspects are not. | I think the writer is human because in the phrase like "there is a haze over everything"—how would a computer know about a haze. |
| Participant 5 | When I am reading it really feel like a human wrote it because there are so many romantic moments and the text is full of emotions. And I think that AI can't write about emotions and a human being wrote it. | I think it is written by a human being because it is very emotional, just like the previous text. |

Table 1. Group 1 (Native speakers) answers

As seen in Table 1, Participant 1 noticed issues with punctuation in the text, drawing attention to the unusual decision in the spelling in the word "no-one." Participant 2's response is focused on the incorrect use of pronouns in the phrase "he pulled her to herself", stated that it seemed as if the program was trained on old books in the phrase "agony of sorrow," and finished by saying that it is only slightly better than *Twilight*. Participant 4 found issues with the logical sense of the text, stating that the subject-object relationship was skewed. However, one respondent did not choose the correct answer as she believed that a human wrote it by saying that the text is full of emotions and that she does not think that AI is capable of writing about emotions in such a way.

The second text had a 100% success rate as all of the participants correctly guessed that it was written by a human. The first respondent stated that they can

easily imagine somebody writing a text like this to their beloved, due to the fact that the paragraph traffics in sentiment. The second participant was fully convinced that a human wrote it because of the linking between sentiment and first-person feeling. Participant 3 stated that AI is capable of recreating love poems, but that these poems would never feel as romantic as a poem written by a human. Participant 4 said that humans have experienced depression so the phrase “you provide me the strength to persevere through my darkest hours” makes sense for a human to say and questioned how a computer would know about a haze. The last participant justified her answer simply by stating that the text is very emotional.

In the second group, i.e. university students, only 3 people (30%) managed to determine that the extract provided to them was not written by a human. Their reasoning behind this is that in some fragments the writing seemed chaotic and incoherent.

| | Text 1—And on her cheek lay a kiss from him... | Text 2—My world feels dark when you're not here |
|----------------------|--|---|
| Participant 1 | This text is pretty emotional. I am not sure if AI can write like this. | This text is smooth and romantic. I can't imagine AI writing in such a powerful manner. |
| Participant 2 | The text is expressive and almost poetic, uses non-standard syntax. | AI wouldn't use ornate language like this, too poetic and romantic. |
| Participant 3 | Complex syntax and the addition of a dash make me think that it was written by a human writer. | An AI machine could try to recreate love poems, but they'll never feel as lively or romantic as one a human could've written. |
| Participant 4 | This looks like a literary piece of text. It has some constructions characteristic for literature. Correctly used collocations. However, the excessive usage of pronouns looks rather odd. | Metaphors, similes, beautiful writing, I can feel emotion in this. |

| | Text 1—And on her cheek lay a kiss from him... | Text 2—My world feels dark when you're not here |
|-----------------------|---|---|
| Participant 5 | I think this kind of Twilight-ish stories is rather a human domain. | The language is relatively complex and the text is grammatically and, more importantly, logically correct. |
| Participant 6 | The text is hard to follow and has many unnatural sounding sentence structures. | Cliche writing, feels borrowed, so I say it's AI; but then again, less skilled writers may also write like this. |
| Participant 7 | Satisfying metaphors, more likely by a human writer. | The wording in phrases such as "shine brilliantly enough", "the world was filled with... streetlights" seems off |
| Participant 8 | AI wouldn't have connected pain and losing control with pleasure what can be seen in this text. | The text is intended to present the other person in a poetic way of affection. However, the computer uses too many words related to physics, such as force, energy, which sounds strange and not very poetic. |
| Participant 9 | It sounds off, unusual wording and sentence structure, lots of commas. No consistency in using dashes and commas for sentence interjections. | Perhaps my intuition is very basic but I think it's human because it's poetic and talks about closeness with another person. I do not think that even if a robot was writing that, it would pay attention to such things as warmth and light. |
| Participant 10 | I think that this text was written by AI machine because I have the impression that in some places the text is written a little chaotically and incomprehensibly. | I think that this text wrote a human, because I have a feeling that it was written by a very sensitive person who knew how to put his feelings on paper, and by reading this text we can feel these emotions. |

Table 2. Group 2 (university students) answers

However, seven participants were believed that a human wrote this extract. The topic itself confused many participants as they did not believe that AI systems are advanced enough to be writing about feelings in such a sophisticated way. Participant 3 stated that in the sentence “she knew she must die, and a night like this would end with no luck—a nightmare of misery and pain, an agony of sorrow, in which there would be no relief” the complex syntax and the inserted dash led them to think that an AI machine would not be able to produce this sort of writing. As seen in Table 2, the majority of participants thought that the text was filled with emotions and expressive language, such as metaphors, thus making them believe that it was written by a human.

Concerning the second text, seven participants correctly guessed that it was written by a human writer, whereas three people thought that the text was written by AI. As shown in Table 2, Participant 7’s answer was based on the fact that the wording of phrases such as “persevere,” “the world was filled with streetlights,” and “shine brilliantly enough” did not seem like a human would write something like this; furthermore, Participant 6 noted that such clichéd writing can only be produced by AI. Participant 8 stated that the comparisons connected with physics such as force, energy, and light made the tone seem mechanical and took away its poetic value. However, the majority of respondents claimed that the emotive expressions and poetic metaphors pointed to the fact that it must have been written by a human. The justifications include ornate language, similes, the text being logically correct, and that the text seemed to be dedicated to someone in particular. What is more, the participants said that an intelligent system would not pay attention to aspects such as warmth and light when describing another human being and that the reader can feel the author’s emotions.

In the last group, consisting of the less proficient English speakers, only 5 participants (33%) correctly identified the text as written by the AI, while 10 people (67%) thought that the text had a human author.

| | Text 1—And on her cheek lay a kiss from him... | Text 2—My world feels dark when you're not here |
|-----------------------|---|---|
| Participant 1 | The text is very emotional and accurately describes the sensual and emotional experience. | The text is too emotional to be written by artificial intelligence. |
| Participant 2 | The emotions seem too raw and genuine to have been written by a machine. | The author didn't lose his train of thought. |
| Participant 3 | Total gibberish, I think it's even worse than Harlequins. | The sentences are well written and easy to read. |
| Participant 4 | Seems to have human emotion. | Looks like a love letter. |
| Participant 5 | I think it's a part of a book. | The descriptions are too detailed for a machine to write this. |
| Participant 6 | This text is emotional. | I think it's from some book I've read. |
| Participant 7 | The very meticulous way the author writes about emotions while using the exact description of events. | Nothing seems to be out of order. |
| Participant 8 | Emotions showed here are too typical, almost like from a harlequin. | Feels like simplified language, not so emotional dense. |
| Participant 9 | This is a very detailed description of an emotional scene. | AI wrote this because it's too cliché to say to any person, there's no personalisation here. |
| Participant 10 | I believe that there are some misgendered pronouns. Some of the sentences feel odd. | A human wrote this because a robot isn't aware of their own feelings. |
| Participant 11 | It is doubtful for me whether a computer that does not feel emotions would be able to describe and express them so well | Human writer, because the robot does not feel its emotions "I will go back to you," robots do not feel emotions like humans |

| | Text 1—And on her cheek lay a kiss from him... | Text 2—My world feels dark when you're not here |
|-----------------------|--|--|
| Participant 12 | The rhymes have disappeared along the way and the sentences are a bit weird, don't know what's going on in this story, but I wouldn't be surprised if it was written by some amateur with that style of writing. | AI produced this, I think so because a human wouldn't write such underwhelming statements about their loved one. |
| Participant 13 | Software can't discuss feelings effectively. | Human emotions |
| Participant 14 | This looks like a love letter to a person you are in love with | I think AI wrote this because it seems to lack specific references |
| Participant 15 | The phrases "she was crying blood" seems odd, as well as "he gave her a hard kiss"—don't seem natural. | An intelligent system can't replicate these raw and pure feelings. |

Table 3. Group 3 (less proficient English speakers) answers

The people who accurately provided the answer stated that what convinced them that it was written by an intelligent system is the fact that some pronouns were misgendered and as seen in Table 3, Participant 3 said that the text was total gibberish. Furthermore, the respondents pointed to two phrases as atypical and unnatural: "she was crying blood" and "he gave her a hard kiss." The respondents who failed to identify which text was written by the AI claimed that "software cannot discuss feelings effectively" and that the text provided an accurate description of a sensual experience.

Regarding the second text, 11 participants correctly identified it as penned by a human, while 4 people thought it was written by an intelligent system. In general, the respondents claimed that the text was too emotional for a robot to be able to write it. Other participants claimed that the writing looked like a love letter, with Participant 10 claiming that a robot is not capable of being aware of their own feelings. As far as the language is concerned, respondents stated that

the sentences were written in a clear and coherent way and that it was easy to read. Furthermore, the comparisons “feels like there’s a haze over everything” and “feels like you are the brightest light in my life” were the determining factor for the participant’s choice.

As expected, the group with the native speakers had the highest accuracy rate when it came to identifying the true author of the presented texts, while less proficient speakers of English had difficulties with this task. This suggests that knowing English could be a determining factor and that native speakers are more likely to recognise when a text has been written by artificial intelligence. The two remaining groups did not have a high success rate of correctly guessing the author of the text, which means that in this experiment, the text created by the AI generator could pass off as one written by a human. They believed that the extract conveyed an accurate and actual emotional experience, that the author provided many specific details related to emotions, and would most likely agree that artificial intelligence is, in fact a creator, meaning that it is able to create texts that could pass as texts written by people.

Poetry

Poetry may prove to be much more difficult to replicate by AI as this type of writing is not only associated with emotions, but also is often based on past experiences of the author and their desire to present them to their audience. Many poems are addressed to a certain person rather than simply produced for the mass audience. Because of these features of poetry, some researchers claim that “journalism, novel-spinning, and poetry all live within the one creative bastion that [...] AI [cannot] possibly disrupt or infiltrate” (Berger).

After analysing half a million lines which were written by human writers, AI was able to create the poem titled “A Box of Light.” The process behind the creation of this piece of writing took over five months, with experts from the Poetry Society, Poetry Archive, and Scottish Poetry Library selecting inputs to be used. This included removing offensive or violent content and eliminating arcane

language. After processing over 40,000 couplets, the poem finally came into being, a result of machine learning and the collaboration between programmers and poets. The said poem is presented below:

and soon I am staring out again,
begin to practise my words, expecting my word
will come. it will not. the wind is calling.
my friend is near, I hear his breath. his breath
is not the air. he touches me again with his hands
and tells me I am growing old, he says, far old.
we travel across an empty field in my heart.
there is nothing in the dark, I think, but he.
I close my eyes and try to remember what I was.
he says it was an important and interesting day,
because I put in his hands one night
the box of light that had been a tree.

The most striking feature of the poem is the comparison of the tree to a box of light. In the past, poets have written numerous poems about trees, one of the most famous being “Trees” by Joyce Kilmer. The main theme of this poem is the magnitude of trees with the poet claiming that no poem could ever be as lovely as a tree. Another poem, “Loveliest of trees, the cherry now” written by A. E. Housman, is a man’s reflection of his own life, and the knowledge that although the speaker is young at the present time, time is short and scarce. Because of the fleeting nature of time, the author will appreciate and admire the cherry tree while he still can. The theme of transience present in those two poems can also be found in “A Box of Light.”

In the AI poem, the topic is also concerned with the fleeting nature of human life and time. This can be seen when the author’s friend says that the author is “growing old, [...] far old” as they have trouble remembering their past. Notes of sadness can also be detected in the phrase “we travel across an empty field in my heart” which implies that there is nothing in the dark. The speaker’s friend reminisces about having received a box of light that primarily had been a tree, which was beforehand stated that it had been an important and interesting event.

What is unique about this poem is that many experts spent countless hours reviewing the process, eliminating errors, and ensuring that the final “product” is comprehensible. At this stage of research, human editors are still a vital component in the process of producing content by artificial intelligence as they ensure that the final product is coherent and comprehensive. The prompt “write a poem titled ‘a box of light’” was inserted into ChatGPT so as to see how well AI could perform without the help of a human editor. The intelligent system produced the following text:

Within this box, a world of wonder,
A universe of colors, bright and thunder,
A glimmering glow, so warm and tender,
A box of light, a magical sender.
Its beams of gold, like liquid honey,
Soothe the soul, chase away the gloomy,
It shines so bright, so full of glory,
A box of light, a timeless story.
It holds the power to light the darkest night,
To show the path, to give us sight,
It brings the hope, the pure delight,
A box of light, an eternal right.
But in this box, a warning too,
To never use it to harm or slew,
For light can blind, and shadows ensue,
A box of light, a force we rue.
So cherish this box, this precious gift,
And use its power with a gentle lift,
For in its glow, our hearts can lift,
A box of light, our souls to sift.

The poem “A Box of Light” is a celebration of the power and beauty of light. The speaker describes a box that contains a universe of colours and a warm, tender glow that soothes the soul and brings delight. The light in the box is seen as a force that has the power to brighten the darkest night, show the path, and bring hope. The poem also carries a warning, reminding the readers that light can also be blinding and that, as a result, should be used with caution. The speaker encourages the people to cherish the gift of light and use its power with a gentle

touch. There are some half- and slanted-rhymes in the poem; furthermore, instead of the rhyming couplets, the poem employs rhyming quatrains—the poem has the following rhyming scheme: AAAA/BCDD/EEEE/FFFF/GGGG, which gives it a musical quality and a sense of flow. The use of imagery, such as the liquid honey, the glimmering glow, and the shining gold, creates a vivid picture of the box of light in the reader's mind. The poem's overall message is one of positivity, urging the readers to appreciate the beauty of light and use its power for good.

The last paragraph was written by ChatGPT as well, meaning that these intelligent systems not only are able to produce content, but can analyse this content as well, making these systems more self-aware. Even though AI has the capacity to analyse its own text, basic mistakes still occur. For example, the system provided the wrong rhyming scheme—it should be AABB/CC'DD instead of AAAA/BCDD as stated in the previous paragraph. Although this technology is already making steady headway in the field of art and will play an enormous role in the art community in the future, as of now it does not notice and/or criticise mistakes in its texts. There are many controversies in the art community concerning AI generated art. One of the main issues is that AI systems need to be “fed” content in order to grow and learn, however, this practice often occurs without authors’ consent. This in turn breaks intellectual property laws, copyright laws, and is simply unfair to the artists who spent countless hours on their work. The creators of Stable Diffusion, a deep learning, text-to-image model, released their source code revealing that thousands of artists’ work had been included in their database—without the knowledge or consent of the artists. Many critics claim that this technology will be the demise of creative art and will eliminate jobs.

Can AI poetry be considered authentic?

Current AI development uses a method known as deep learning, which is a subset of machine learning. The aim of machine learning is to “develop algorithms that learn interpretation principles from training samples, and apply them to new

data from the same domain to make informed decisions” (Chassagnon et al.). However, deep learning is a step further as it “imitates the way humans gain knowledge” (Petersson). Thanks to this technique, computer programs have the ability to learn from enormous sets of data in a shorter amount of time. In the case of poetry, an intelligent system can analyse a myriad of poems and then generate its own content. But would it still be considered poetry? According to cognitive psychologist and poet Keith Holyoak, a successful poem has several components: “compelling content with aesthetically pleasing wordplay (metaphor and other varieties of symbolism), coupled with the various types of sound similarities and constraints of form” (176). As shown in the examples above, artificial intelligence is able to produce words within a set structure and employ the use of poetic devices such as alliteration, rhyming schemes, and metaphors. However, as Holyoak points out, there is the question of consciousness. Edmund Clarence Stedman once said that “natural emotion is the soul of poetry” (11) and that poetry is used to convey emotions. As of now, artificial intelligence is not developed enough to possess natural emotions, does not have inner experience nor does it have a consciousness. This means that according to these researchers and poets, artificially produced poetry is not authentic. The actual answer to this question depends on whether or not a poet needs to have a conscious mind in order for its poetry to be considered authentic.

Conclusions

To conclude, AI has become advanced enough to generate meaningful and intelligible pieces of writing, which will continue to improve. The conducted experiment showed that texts created by AI could pass as texts written by humans. What is more, thanks to machine learning techniques, these intelligent systems are able to produce poetry; what remains to be determined is whether or not this sort of writing may be considered authentic and how to regulate copyright laws for AI-generated art.

References

- Berger, B. 2020. "What Does it Matter if AI Writes Poetry?" *Medium*. <https://becominghuman.ai/what-does-it-matter-if-ai-writes-poetry-54665a950a37>, DOA 17.01.2023.
- Boden, M. 2016. *AI: Its Nature and Future*. Oxford: Oxford University Press.
- Chassagnon, G. et al. 2020. "Deep Learning: Definition and Perspectives for Thoracic Imaging," *European Radiology* 30, 2021-2030. <https://doi.org/10.1007/s00330-019-06564-3>, DOA 20.01.2023.
- Flood, A. 2021. "'A box of light': AI Inspired by British Verse Attempts to Write Poetry," *The Guardian*. <https://www.theguardian.com/books/2021/mar/20/a-box-of-light-ai-inspired-by-british-verse-attempts-to-write-poetry>, DOA 15.02.2023.
- Hart, M. 2020. "Google's New AI Helps You Write Poetry like Poe," *Nerdist*. <https://nerdist.com/article/google-ai-writes-poetry-like-legendary-poets/>, DOA 15.02.2023.
- Holyoak, K. 2019. *The Spider's Thread: Metaphor in Mind, Brain, and Poetry*. Cambridge: The MIT Press.
- Housman, A.E. 1896. *A Shropshire Lad*. New York: The Bodley Head.
- Kaufert, D.S., J. R. Hayes & L. Flower. 1986. "Composing Written Sentences," *Research in the Teaching of English* 20, 121-140.
- Kilmer, J. 1913. *Trees and Other Poems*. Minneapolis: George H. Doran Company.
- Kloppers, M. n.d. "Cute Love Paragraphs From The Heart". <https://www.thoughtsonlifeandlove.com/cute-love-paragraphs-from-the-heart/>, DOA 08.01.2023.
- Lerman, R., & P. Verma. 2022. "What is ChatGPT, the Viral Social Media AI?" *The Washington Post*. <https://www.washingtonpost.com/technology/2022/12/06/what-is-chatgpt-ai/>, DOA 02.02.2023.
- Ortiz, S. 2023. "ChatGPT is Changing Everything. But it Still Has its Limits," *ZDNET*. <https://www.zdnet.com/article/chatgpt-is-changing-everything-but-it-still-has-its-limits/>, DOA 17.02.2023.
- Petersson, D. 2021. "AI vs. Machine Learning vs. Deep Learning: Key Differences," *TechTarget*. <https://www.techtarget.com/searchenterpriseai/tip/AI-vs-machine-learning-vs-deep-learning-key-differences>, DOA 18.01.2023.
- Plain Language Association InterNational. 2015. "Plain English Campaign," <http://www.plainenglish.co.uk/>.
- Semantic Experiences. "Verse by Verse," <https://sites.research.google/versebyverse/> DOA 20.12.2022.
- Sharples, M., & R. P. Pérez. 2022. *Story Machines: How Computers Have Become Creative Writers*. Abingdon: Routledge.
- Smodin LLC. 2022. "How Does Smodin Author Work?" <https://smodin.io/writer>, DOA 07.01.2023.

Stedman, E. C. 1885. "The Twilight of the Poets". *The Century Illustrated Magazine* 5, 787-800.

Text Generation API. 2019. "The Road to Artificial General Intelligence." <https://deepai.org/about>, DOA 07.01.2023.

Abstract

Artificial intelligence is already developed enough to perform mechanical and computerised tasks, but the ability to convey emotions and recreate human consciousness is currently being studied. This article will primarily deal with AI-generated literature, focusing mainly on short text extracts and poetry. The selected research method in this article is qualitative research. A linguistic analysis of individual texts was carried out, as well as a comparison of the texts themselves. An experiment was conducted in which a group of participants decided whether the presented text was written by a human or artificial intelligence. In addition, I examined the positions in the discussion whether AI poetry can be considered authentic.

Sztuczna inteligencja jest już na tyle rozwinięta, aby wykonywać mechaniczne i skomputeryzowane zadania, ale jej zdolność do przekazywania emocji, odtwarzania ludzkiej świadomości oraz poziomu myślenia i odczuwania jest jeszcze w fazie badań. Niniejszy artykuł zajmuje się przede wszystkim literaturą wygenerowaną przez sztuczną inteligencję, skupiając się głównie na krótkich fragmentach tekstu i poezji. Wybrana metoda badawcza w tej pracy to badania jakościowe. W artykule przeprowadzona została analiza językowa poszczególnych tekstów, a także ich porównanie ze sobą. Dla celów artykułu przeprowadziłam eksperyment, w którym grupa uczestników miała za zadanie określić, czy przedstawiony tekst został napisany przez człowieka, czy sztuczną inteligencję. Dodatkowo, w niniejszym artykule zostanie przedstawione stanowisko w dyskusji, czy poezja napisana przez SI powinna zostać uznana za autentyczną.

Miriam Kobierski has a Master's degree from English philology at the University of Łódź, where she is now a doctoral student at the Doctoral School of Humanities. Her main area of research is linguistics and she is particularly interested in the field of Artificial Intelligence. As for her academic career, she has presented papers at academic conferences, was on the planning committee of two conferences, as well as published several articles in linguistics and philosophy.