AI’s Poem:
On the Differences between AI Works and Human Works

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Abstract
The publication of chat-bot Little Ice’s first collection of poems shows that Artificial Intelligence is accelerating its pace of entering into the field of human artistic creation. The differences between AI works and human works cannot be equated with those between works of art and natural objects or with works of art and products. But in the process of comparison, characteristics of AI works are highlighted. The differences of work between AI’s and human’s are not those between inferiors and masterpieces, but the differences between artistic events. AI will never replace human beings in the field of art.

Keywords
Artificial intelligence; Artificial intelligence works; Artistic creation; Human works; Artistic events

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In May 2017, a collection of poems entitled “Sunshine Misses the Glass Window” was published. Unlike any previous anthologies in human history, Little Ice, the author of this anthology, is not a human being, but an Artificial Intelligence. It is reported that tens of thousands of poems

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by 519 poets over the past hundred years were absorbed by Little Ice as training materials, and she can write poems after nearly 10,000 times of training in 100 hours. She posted her works on various internet poetry forums using the pen name “Little Ice” after the poems were completed, and even won several traditional literary publications over. However, no one saw through Little Ice before she revealed herself. So, what on earth are poet Little Ice’s poems? Part of her poem “She Married Many Colors of the World” is shown as follows:

Look at the glimmering several stars  
Sun above the west hill  
Frog in the shallow water afar  
She marries the colors on the earth.  

Admittedly, I couldn’t help but utter an exclamation when I read this poem. Especially in the last two sentences, Frog in the shallow water afar; She marries the colors on the earth, a beautiful and harmonious artistic scene was created by the frog “married” the colors on the earth. The frog seems to be affectionate surrounded by the flowing shallow water, therefore, the word “marry” is very delicately selected here.

In that case, are there any differences between AI works and human works? If so, what are they? Whether AI works will replace human creations or not?

1. The Orientation of AI Works

We are going to take a detour in order to clarify the differences between AI works and human works. The differences will not be directly compared, but to be figured out whether or not are they similar to the important “differences” in the known art field, so as to laterally position AI works.

The first question to be discussed is whether the differences between them are the differences between natural objects and works of art. Obviously, natural objects are not artworks. Artistic theorists once discussed the “driftwood problem”: Whether or not is a piece of untouched driftwood on the beach an artwork. Many people may respond negatively. But one may hesitate before drawing the

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conclusion if they are told that this driftwood looks especially alike Brancusi’s *Bird in Space*. Art theorists hold different opinions as well. In Weitz’s view, the driftwood is an artwork. While it seems to Sclafani and Dickie that driftwood may resemble an artwork in particular, whereas it may not on the level of classification. It only represents art on evaluation and derivation levels. Being considered as a work of art “only means that the referent of the driftwood has some valuable qualities” 1. Therefore, in Dickie’s view being an artificial product is the prime factor of being considered as an artwork on the classificatory level. He points out that artifactuality is a necessary condition for the basic meaning of art” 2. Therefore, the driftwood is not an artwork on the classificatory level. The huge difference lying between nature objects and art is whether people are involved. Obviously, there are no human participations when natural objects come into being, but there are human participations during the formation of art. Meanwhile, possibility of natural objects transforming into artworks resides. Dickie broadly defines human participation, and it is not just about handiwork. He points out: “Natural objects can be turned into artworks as long as any of the work is done by human. One of which is that a natural object is picked up, brought home and hung on the wall. Another of which is that it is picked up and sent to the museum. […] The artworks transforming from natural objects have gone through tool-less human handiwork. So as to say, that artifactuality is not generated through, but authorized by human handiwork. It means that artifactuality is acquired when a natural object is recommended to be exhibited.” 3 Therefore, if an artist picks up the driftwood and sends it to the museum for exhibition, then, the driftwood will become an artwork.

Can works created by AI be considered the same as natural objects? At first glance, both of the two categories do share two similarities, that is, purposeless and unintentional. Although both of them are like artworks, the “author” AI has no purpose or intention to express anything, but automatically generates the appearance of artwork. Works created by the “author” cannot spontaneously become artworks, but need to be selected by someone else. In other words, their artistic status are granted by human beings. However, after careful consideration, differences exist between AI-created works and natural objects. Pure natural

things are only things in the nature shaped by forces such as wind, frost, snow and rain. While AI works have obvious traces of human participation. Human beings do not participate in the process of work creation, however, they design AI programs, and AI automatically generates art according to such programs. Therefore, we can say that on one hand, natural things become art only by coincidence because they happen to be similar to the artistic appearance created by human beings. On the other hand, AI works become art because AI has learnt human art, and then creates a similar art form. Meanwhile, choices on natural things made by human are based on serendipity. One may be familiar with Brancusi’s works and comes across a similar piece of “driftwood” when strolling on the beach. The selection of AI works is planned by human when AI is arranged to produce works. It is a necessary process for AI works to reach the readers. According to Dickie, this is already “artificial” and meet the basic conditions of becoming art. Therefore, we cannot say that the difference between AI works and human works is the difference between natural objects and works of art. After all, AI art is not entirely equal to pure natural objects. However, we can see from Dickie’s “artifactuality”, that is, from the perspective of human participation, there is none in natural works. Human participation is directly in human art, while, it is indirectly in AI works. This is one of its particularities: It contains indirect human participation rather than a direct one.

Will the difference between AI works and human works be equal to the difference between products and works of art? As is known to all, products are not artworks. Simmel has discussed this in detail. In his view, a product is completed by collaboration, and artwork should be done alone. Therefore, work of art is the reflection of artist’s “personality” and “creative mind”. Both artist’s personality and mind are wiped out: “The more distinctive means of production are, the more they are composed by a multitude of specialized parts, the less is the worker’s personality expressed, and the less visible is his personal contribution noticed from the product. Tools that artists use are relatively undifferentiated and thus provide personality with the widest scope for releasing all its capacities”. Therefore, in Simmel's view, “The significance of product is thus to be sought neither in the reflection of subjectivity nor in the reflex of creative spirit, but is to be found only in the objective achievement that departs from subjectivity. This

relationship is equally well illustrated by its extreme opposite, the work of art. Artwork’s nature completely resists the subdivision of labor among a number of workers, and none of them can finish an artwork on his own” ⁵. Which shows that there is a huge difference in nature between products and works of art. However, it is worth noting that due to product’s inborn artificiality, transformation from product to artwork is relatively easy, so as to say, the boundary between the two tends to be blurred. Duchamp’s “Fountain” transforms a “product urinal” into an “artwork urinal”, as does Warhol’s “Brillo Box”. Howard Becker points out that art is a collective activity, and an increasing trend of collective cooperation is also seen in contemporary art production. Even large machines, such as on Xu Bing’s “Phoenix”, are used for welding by workers. This new situation may weaken Simmel’s argument. However, fundamentally speaking, it is still very difficult to casually equate products with artwork. After all, there is still an undeniable divergence between the various “products” used in our daily life and “artworks” in museums.

In this regard, AI works do have many similarities with products because they are all done by human beings with the help of machines. Whereas it is noteworthy that there are also notable differences between the two type of works. They lie in the fact that products are accomplished by machines, and as for AI works, by artificial intelligence. It is “intelligence” that sets AI apart from machine: It has the same intelligence as human beings. Controlled by human beings, the machine passively manufactures products of repetition and replication. With only one instruction, unrepeatable and innovative works are automatically created by AI. Moreover, machine works are generally completed for practical purposes, while AI works are for appreciation and experience purposes. To conclude, differences between these two types of works can not be ignored. Difference between AI works and human works cannot be regarded as difference between products and human works.

We have such criteria to probably position AI works. According to the criteria, The degree of human participation is none among natural things, indirect among AI works, and as for human works, they are the result of independent human creation. In this regard, the work of AI is a kind of “quasi-artwork”: AI works have no difference from human works in form, but when compared with

artwork rather than handicraft, they are made by AI. Essentially, human beings and AI have different ways of dealing with art, especially with literature, the art of language. 6 Such criteria has led to the distinctive dissimilarity between AI works and human works.

2. Aspect of form: Not the Difference between Masterpieces and Inferiors

Shall the difference between works of human and AI be considered as what it is between good and bad? That is to say, are human works masterpieces, while AI works, inferiors?

Han Shaogong points out that the “high value” writing of human can not be surpassed by AI: “The so-called ‘high value’ is not reflected as conclusions and labels, but resides in the whole process of ‘story, plot and language’ of forming a general aesthetic creation effect”. 7 In other words, AI can produce, but can only produce second-rate works. First-class works by human beings are beyond their capabilities. Han also points out: “AI writing can convey the unanimous popular truth without any problem, for it is based on database as well as sample size, and carries on the old value judgment. But creating new value judgment and surpassing stereotype may become its short board in face of the diverse and ever-changing real life.” 8

In Han’s view, AI shares no human values, but “they are the final characteristics and superiorities of human beings.” 9 In this regard, literature and art are precisely loaded with human values: “Human intelligence is only the fruit of civilization derived from social and historical minds accumulation. Literature is part of this intellectual advantage. It is excellent value transition that differs literature from general entertainment such as chess and magic cube. It is convention break-

6 See Xu Yingjin: ”Mother tongue awareness” in AI research - Taking the description of Chinese quantifiers as an example", Social Science Front, No. 1, 2018.
9 Han Shaogong, "When Robots Establish Shaogong", "When, No. 6, 2017."
ing, innovative truth, goodness and beauty discovery, as well as human love and righteousness guardian that distinguishes a good writer from a common one.” 10 From this perspective, human creation is beyond the reach of AI:

Faced with the diversity and variety of life, literature is best at expressing all kinds of phenomena, such as impermanence of language, the combination of right and wrong, as well as combination of inter-generation and inter-restriction. It is also best at establishing relationships. Constant changes of human experience and imagination, and surges of values are not necessarily manifested in candid literary preaching, which is clumsy to do so, but in new tones, rhetoric, atmosphere, artistic conception, stories and structures. […] The complexity residing between the lines can not be exhausted by any sets of code and logic. 11

Compared with human creation, the production of chat-robot Little Ice is then degraded. Commentators pointed out that “making poetry is different from creating poetry. With templates, routines and formats, anyone can make poems, and through algorithm advantage, AI can make poems even faster in speed and more in amount. But there is no template for poetry creating, because what poets ultimately present to readers is not poetry text, but their souls”. 12 Whereas we cannot simply equate difference between AI works and human works with the difference between good and bad, because the actual situation is much more complex.

First of all, it should be pointed out that human creations are not all first-rate ones. They are mingled with slipshod works, or even most of them are mediocre. In fact, we can just find that human beings also make so many “robotic” works. As long as you are familiar with the Three Hundred Tang poems, you can moan without illness and lyricize without experience. Howard Becker, in his book Art Worlds, has explored unambitious professionals whose creations are in full conformity with artistic conventions without any innovation. These may be similar to AI creations. Becker points out: “Such a work might bore everyone involved. By definition it contains no novelty, uniqueness, or any highlights. Nothing was beyond anyone’s expectations. It creates no tension and arouses no emotion. Paint-

12 Gong Zi, “The first anthology of AI poetry in history has been published. How on earth should we understand poetry?”, Beijing Newspaper Book Review Weekly, May 27, 2017.
nings on motel walls are just such normal works”. Han Shaogong once commented on an application called “Eureka”:

“Eureka” is just a gadget with normal algorithm and database. However, its works are hard to be distinguished from manmade poems, and has seriously hit the self-esteem of many poets through its faster speed of creation and broader breadth of subject compared with human. In ancient China, such batch of high-yielding elegance is indeed abhorrent, words flowing from the mouth as from the pen of a master, accomplishing a poem within five-step time, and everything can be chanted. But will well-dressed living person certainly be more elegant than the ancients?

In Han Shaogong’s view, some nowadays creations are precisely dominated by this kind of “AI” creation. They can be divided into two categories: one is typed writing, and the other is “dressing up” writing. Both of which are “less innovative writing without pressure, content and difficulty” which can be replaced by AI.

Whereas AI also creates masterpieces. At least there is a possibility for it to do so. In Liu Cixin’s science fiction Poem Cloud, an alien god “Li Bai” claims itself as technologically advanced and omnipotent. While earthman Yiyi is dissatisfied, and argued that Li Bai cannot write Chinese Tang poetry. Thus, in use of its ultimate technology, the extraterrestrial god produces an earthshaking poem cloud with a diameter of “10 billion kilometers” containing all possible poems. That is to say, chances for AI creating outstanding works do exist. In fact, it is hard to distinguish AI works from those done by human in reality. Han Shaogong once experimented with the following two ancient poems:

One
Lean against the west window in corner, listen to the tide,
Lightboat floats on water.
Misty rain afar in late autumn,
Clouds rise in my drunk dream alone.
Two
Above the estuary at west ferry the moon just rises.
Misty vapor goes up into the sky.

Quiet islet and white sand blurred in dark.
Lantern light flickering on the fishing boat.

The experiment of telling these two poems, one from Qin Guan in Song Dynasty and the other from application “Eureka” launched by IBM company, ended with shocking results. Han Shaogong said: “When it was experimented in a university, more than 30 literary graduate students, professionals with reading experience and appreciation ability, hesitated before making decisions. If I swipe the screen, let “Eureka” provide a few more poems, and tangle them with non-AI poems, then the probability of separating works by Master Qin of the Euphemistic School is even smaller”. Therefore, the distinction between masterpieces and inferiors cannot be simply regarded as the distinction between human works and AI works.

3. Processual Aspect: Difference between Artistic Events

Difference between AI works and human works cannot be defined as difference between masterpieces and inferiors. In the deep sense, the difference between good and bad is the difference between “objects”. In fact, the real difference between them is hard to distinguish from the level of “object”. Therefore, we need to change our artistic concepts at the level of “event” for discussion. Then we can find new differences between the two types of works, and perhaps they are the real difference between AI works and human works.

Assuming that AI has not come across certain works of human, but creates exactly the same work. Are these two works the same? To answer this question, let’s first discuss whether the two works are the same if human beings themselves create such works. In Transformation of the Commonplace: A Philosophy of Art, Danto cites a delicate example of Quixote by Cervantes and Quixote by Menard: In Jorge Luis Borges’s novel Menard did not read Quixote by Cervantes, but wrote a novel Quixote, which is a word for word version of Quixote by Cervantes. Are these two works the same? From the perspective of form, they are. But the meanings of them are quite different. Danto points out that:

16 Han Shaogong “When Robots Establish Shaogong, "When, No. 6, 2017.
Borges tells us that the *Quixote* of Menard is infinitely more subtle than that of Cervantes, while that of Cervantes is far more coarse than its counterpart even though every word contained in Menard’s version can be found in Cervantes’ at each corresponding position. He writes: “the archaic style of Menard, a foreigner after all, suffers from affectation. While his forerunner handles at ease the popular Spanish of his time.”

Danto finds that “they have only in common those qualities recognized by eyes, while using them for artistic identify is even much worse. This example philosophically forces us to avert our eye from the surface of objects in search of the deeper differences between distinct works.” In my opinion, the key lies in the context.

On this basis, assuming that AI has not read *Quixote* by Cervantes, but it creates the same work out of infinite possible combination of words. Are the two works the same? Similarly, assuming that AI has not learned Beethoven’s *Symphony of Fate*, but also creates the same Symphony from an infinite number of possible sound combinations. Are they the same, too? Negative conclusion can be drawn from the discussion above. Although they have the same appearance, their contexts are quite different, which will lead to huge differences on their meanings.

Back to *Sunshine Misses the Glass Window* by Little Ice. Shen Xiangyang, Microsoft’s global executive vice president, claims that “maiden poet” Little Ice has both IQ and EQ, but who is she? Will she have feelings about her own life and is her poetry a reflection of that life course? Without specific life experience, isn’t she just practicing wording and phrasing, and will her lyric poems be meaningless then? As some commentators have pointed out: “Little Ice can make but cannot write poetry. Without initiative to feel the world, poetry means nothing for either AI or human.”

In fact, scholars hold different opinions on who is the “author” of AI works, which inevitably influences the significance of works. Some points out that we

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19 Gong Zi, “The first anthology of AI poetry in history has been published. How on earth should we understand poetry?”, *Beijing Newspaper Book Review Weekly*, May 27, 2017.
can classify AI works as “works of legal persons”: “Evolution of AI can not be separated from big data and capital, so it must rely on large enterprises possessing them. At present, giants like Google and Apple are busy at purchasing leading big data and AI companies. If AI works are regarded as legal person works, the ownership of works and data will fall into the hands of a few large companies”. In this way of thinking, authors of AI works are “legal person” like Google and Apple. If so, the copyright of Little Ice’s poetry collection belongs to Microsoft. How it may influence our understanding of her poems? Can we get a bit smell of money in them? Similarly if we identify the author of Little Ice’s poems as software designer or programmer, our understanding of her works will also be influenced, although we can not elaborate on its impact in detail and in depth at present.

In other words, when we explore the meaning of artworks, although pleasures can be independently found from the external form and content of artworks, we will also incorporate things related to artworks into how we may respond to them. Thus, due to different author, same artworks may offer different reading experience. The author once pointed out that art is an event, not just a work. In other words, art is not only material, but also eventual:

The so-called “art as event” means that art is not only an objective object, emitting aesthetic light statically. As objects, art will have connections and experiences added to it and then changes its meaning. In this regard, art is like a person whose value lies not only in its presented appearance, but also in its relevance and circumstances, which will increase its own value. Understand the meaning of art as like understanding what a person may going through, that is to say, instead of static object, artworks are dynamic events. Everything related to it will step into such an event. Therefore, we no longer try to understand the meaning of art as objects, but as events.

Therefore, art as objects are the same, while as events, may be different. AI Little Ice can write poems, but even if she wrote poems the same as Du Fu, without suffering from his miserable experience, her works still lack that “melancholy setback” residing in Du Fu's poems. Rather than sensitive touch in Du Fu’s po-

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ems, her works provide with us only pretentious and vague feelings. Therefore, although impulse and appreciation may be aroused by her poems, however, without real life experience, Little Ice’s poems lose the possibility of arousing readers’ sympathy and commitment. Even the line “Frog in the shallow water afar, She marries the colors on the earth” presents nothing but emptiness.

Conclusion

Therefore, the difference between AI works and human works is not the difference between good and bad. Purely from the perspective of “objective”, we cannot distinguish those two works. The difference between them is the difference between artistic events at the more fundamental level of “event”. AI works may be the same as human works, but they are different events. Therefore, we never need to worry that human beings would be replaced by AI in the field of art. Works of AI can only grant people with simple form of impulse rather than rich and profound event correlation, which deepens the meaning of art and then lets it become vivid, substantial and touching.

Finally, let’s return to Liu Cixin’s Poem Cloud. In terms of possibility, the poetry cloud in the novel may always exist. However, every poem in it needs to accord with concrete experience of human beings. Only in this way can they become vivid and substantial more than wording and phrasing. As what is written in Poetry Cloud:

“Since the poem cloud contains all the possible poems, naturally some of them must describe all our past and all possible and impossible future. Yiyi surely will find a poem describing what he felt when he trimmed his nails one night thirty years ago……,” After Li Bai has landed on the ground, he took out two chips, glittering in the light of the poem cloud, and says “This is my gift to you before I leave. Taking your name as the keyword, hundreds of millions of poems related

22 As far as reading Du's poems is concerned, Qian Mu once pointed out: "We should read Du's poems year by year. Take his poems year by year to examine the background of his poetry. To know where, when and under what background he wrote this poem, we can really know the beauty of Du's poems... We should take all his poems and match them with all his life background, so that we can know where his poems are really good". (See Qian Mu, On Chinese Literature, Joint Publishing Company, 2002, pp. 117-118.)
to you in the poem cloud describing your possible life in the future are retrieved by the quantum computer. Of course, they only take a small part of the poems describing you. Among dozens of them, my favorite one is a Seven Speech Poem about Yiyi, describing his love with a beautiful village girl by the river.²³

Isn’t it because what Yiyi the earthman “felt when he trimmed his nails one night thirty years ago” or because he will “fall in love with a beautiful village girl by the river” that endows those poems in the poem cloud with vivid meanings? Otherwise, what are the meanings of those poems?

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