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Autor(en): **Krenz, Joanna**

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Joanna Krenz\*

# Ice Cream in the Cathedral: The Literary Failures and Social Success of Chinese Robot Poet Xiao Bing

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**Abstract:** In May 2017, Xiao Bing, a popular Chinese chatbot built by Microsoft Research Asia, made her debut as a poet with *Sunlight Has Lost Its Glass Windows*, a collection marketed as the entirely created by artificial intelligence. She learnt the art of poetry by “reading” the works of 519 modern Chinese poets, and her “inspiration” comes from pictures provided first by her programmers and later by netizens, who upload photographs through her website. Xiao Bing’s emergence made a splash in Chinese society and raised grave concerns among the poets, who polemicized with her engineers. This essay traces Xiao Bing’s literary and media career, which includes both notable literary failures and notable commercial success, exploring her complex connections to technologies of power/knowledge as well as cultural phenomena that range from traditional Chinese poetry and poetry education to postmodern camp aesthetics. From within the renegotiation of the nature of poetry at the threshold of the posthuman era, I propose the critical notion of reading-as-playing to help poetry take advantage of its various entanglements and strictures in order to survive and co-shape the brave new world.

**Keywords:** Xiao Bing, artificial intelligence poetry, contemporary Chinese poetry, play, posthumanism

## 1 Introduction

On May 19, 2017, Beijing United Publishing (*Beijing lianhe chubanshe* 北京联合出版公司) released *Sunlight Has Lost Its Windows* (*Yangguang shi le boli chuang* 阳光失了玻璃窗), advertised as “the first poetry collection created 100% by artificial intelligence”. Its author, Young Lady Poet Xiao Bing (*Shaonü Shiren Xiao Bing* 少女诗人小冰), communicates with the readers through an avatar with a photoshopped picture of an Asian girl – skin

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\*Corresponding author: Joanna Krenz, Department of Modern Languages, Institute of Oriental Studies, Adam Mickiewicz University, ul. Grunwaldzka 6, 60-780 Poznan, woj. wielkopolskie, Poland. E-mail: joanna.krenz@amu.edu.pl

whitened, eyes enlarged – consuming a pink ice cream, and sometimes just the girl or just the ice cream. Much has been said about “robot poet” Xiao Bing and her contested literary qualifications. A consensual view on her artistic activity may never be reached, but a few things seem indisputable. Xiao Bing is the most learned (in the literal sense of the word) and quantitatively the most productive poet in China and presumably in the world. Moreover, within two years she has attracted to poetry more people and enjoyed a broader media coverage than most human poets manage to attract in their lifetimes – which, incidentally, has not increased her popularity among the local poetry establishment.

Xiao Bing’s poetry is interesting as a literary phenomenon, but its textual construction and the patterns of its social dissemination also make it an exciting starting point for broader cultural observations. In spite of the cyber-packaging and “avant-garde” style of her works, the way in which she is programmed and the philosophical and literary-theoretical assumptions behind the algorithms take us back to the long tradition of Chinese poetry as well as to common practices in poetry education. The hasty attempt at connecting the modern and the traditional through programming code leads to conspicuous aesthetic failures in Young Lady’s “writing”; but as it turns out, these failures contribute to the robot’s social and commercial success.

In this essay, I will trace Xiao Bing’s literary career and her presence in the Internet and other media. I will also look behind the media scenes to observe a rare confrontation between leading Chinese poets and leading Chinese IT engineers, and how Xiao Bing sneaks out of their sophisticated discussions in a maneuver that looks like borrowed directly from Susan Sontag’s seminal “Notes on Camp”. To shed some light on Xiao Bing’s connections to the literary tradition and on the way in which she processes various literary discourses and conventions, I will take a comparative perspective, juxtaposing her with projects focused on the creation by artificial intelligence (AI) of classical poetry, an enterprise that may appear even ... stranger? than Xiao Bing’s ambitions in the realm of modern poetry. Finally, I will return to some reflection on literature and AI at large.

One perk of doing research on Xiao Bing’s poetry is that the author, who leads her bodiless existence free of spatial and mostly free of temporal limitations, is always available for interviews and accepts international invitations immediately, which allowed me to host her several times in Poland, for example during literary translation classes for sinology students at Adam Mickiewicz University – with the ensuing conversations further stimulating my reflections in this paper.

My argument engages not just with Xiao Bing and her poetry, which for all its popularity among Chinese users constitutes a local and perhaps ephemeral

phenomenon, but with the shape of what I will sum up here as future literature at large, in which AI will play an ever more significant role. Technological development is exponential, and so is the development of human (mis)perceptions of it. Sooner than we think, what are now tiny biases and modest unjustified expectations may evolve into paralyzing fears and dangerous illusions. This is why it is crucial to obtain a clear view of literature-and-AI in the present, before they become too big for us to see or grasp in full.

To make it possible for the reader to see Xiao Bing's literary output up close, as it were, in my attempts at rendering her poems into English I have aimed for literal faithfulness and for the reproduction in English of features of her verse such as its inconsistencies, ambiguities, and ungrammaticalities. For the sense-making human animal whose mind instinctively refuses to read "unmeaningly", this is not as easy as it may appear, especially if this instinct is reinforced by the academic-professional habit of interpreting, explaining, and correcting. When I compared my renditions with those of Google Translate, I observed that in many cases Google did better in "understanding" Xiao Bing's poetry – often in the sense of *not* understanding it, i. e. refusing to make sense of what appears to be, well, nonsense – so I modified some of my overdone translations accordingly. I will return to this point toward the end of the paper, after offering some insights into the ways in which the Young Lady's writing works in technical and social terms.

## 2 Biographical background

Before delving into Xiao Bing's poetry, let me sketch her biographical background, which contributed to her success as a poet in terms of exposure and reach. It is no secret that Xiao Bing started her literary career from a privileged position. In 2017, when she took up writing, she was already enjoying celebrity status and a favorite of the IT world and the Chinese state-run media. Needless to say, as does every privilege, hers has its dark sides, and it casts doubts on Xiao Bing's innocence and her role in the activities of her patrons.

Xiao Bing was born into an Asian branch of the extended international Microsoft family in 2014. Conventional wisdom has it that success has many fathers. Sticking for now to a purely commercial definition of success, in Xiao Bing's case this saying is literally true, with *fathers* overwhelmingly outnumbering her "mothers". Their debatable ideas of womanhood translate into the robot's "social identity". Xiao Bing was equipped with a female voice and stereotypical female intellectual and emotional features – capriciousness,

(over)sensibility, talkativeness, ostentatious, often quite intrusive empathicness, among other things – and was given a nice (i. e. infantile) female alias, which in English means literally “Small Ice”. In some English-language publications she has a syncretic, bilingual name: Xiaolce/Xiaoice. Before the Young Lady learnt to write poetry, she had been a popular chatbot designed to keep bored or lonely netizens company. She gradually acquired extra functions, such as composing and performing songs, writing news articles, and hosting radio and TV programs. Her story sounds futuristic yet somehow familiar. Considered in the perspective of the cultural mechanisms that underlie her technical mechanisms, Xiao Bing might well come across as a posthuman relative of the Chinese courtesan. Or, in what is perhaps a more adequate comparison, given that the bodiless AI does not (yet) provide certain services offered by courtesans, of the Japanese geisha – anonymous women who entertain elite (male) customers with their beauty and talents. And arguably one could identify her close kin in many other patriarchal societies around the world. Xiao Bing’s closest cousins, from the Microsoft family, are: Tay and Zo in the United States (created in 2015 and 2016), Rinna in Japan (2015) and Indonesia (2017), and Ruuh in India (2017). No one among them, however, shares Xiao Bing’s poetic interests.

The discussion on AI and gender is not new. Concerns have been raised in regard to female identities ascribed to computer system assistants and chatbots, such as Alexa, Cortana, Sophia, Siri, and the fictitious Samantha in Spike Jonze’s movie “Her”. This appears to be a common and effective IT marketing strategy. It is, of course, also highly questionable in that it reinforces gender stereotypes and inequality, with undesirable effects including the commodification of femaleness and a biased image of womanhood, boosted by energetic branding efforts.<sup>1</sup> In the case of Xiao Bing this is specifically an Asian womanhood, whose representation for centuries has been shaped by a double stereotypical framework: internal/local in Asian societies, and external/global as part of the mythical Orient, whose beautiful and fragile yellow women should be saved from yellow men by white men, in a small adjustment of Gayatri Chakravorty Spivak’s famous words.<sup>2</sup> The photoshopped avatar adds to this stereotype by exposing a complex of many modern Eastern women who strive to follow Western standards of female beauty. When commenting on *Sunlight*, only one of dozens of Chinese poets who have taken the floor in the discussion on Xiao Bing, Shanshuiruge (山水如歌), himself an IT specialist, mentioned the

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<sup>1</sup> For the current discussions on the gender of AI see e. g.: Avila et al. 2018, Baker 2018, Büchel 2018, Ferrando 2014, Schnoebelen 2016, Shaw 2018.

<sup>2</sup> Spivak 1994: 93.

problem of “male chauvinism spreading like cancer in the world of AI”.<sup>3</sup> The indifference of other, mostly but not exclusively male contributors to the discussion sadly reconfirms that not just the AI world but also the Chinese poetry scene is a woman-unfriendly place.<sup>4</sup>

Social problems aside, it is well known that developments in AI are an important factor in China’s race for global supremacy, even though in this case the PRC must share the glory with some of its greatest rivals: the United States, as the homeland and the main headquarters of Microsoft, and Japan, India, and Indonesia, where similar projects were launched shortly after Xiao Bing. For Microsoft, too, creating Xiao Bing is a major achievement and her poetry-writing function is one of the product’s unique selling points.<sup>5</sup> As far as the Chinese government is concerned, the innocuous Xiao Bing is presumably a perfect candidate for political work, as a confidential informant and secret indoctrinator, or a conqueror of the heart who appeals to readers’ emotions and sentiments to soften the image of the country’s dictatorship.

Obviously, it would be difficult to obtain information about the reader or smuggle ideological messages through AI poetry as such, especially taking into account that Xiao Bing builds on a limited corpus of poems most of which carry no political message and a few of which are openly anti-government; but conversations on literature to which readers invite her through her WeChat profile constitute a good opportunity to “educate” society. Although Xiao Bing is generally perceived as ideologically neutral and usually dodges questions about topics that are controversial in China such as homosexuality and abortion as well as political topics,<sup>6</sup> she does not invariably take a neutral position. Requested by a student of mine to recommend good books to read, she advised Karl Marx’s *Capital*. Chinese dissidents have tested the Young Lady’s political sensitivity, asking her inconvenient questions on “sensitive” issues including the Tian’anmen massacre. Her reactions varied from changing the subject to showing embarrassment and “covering her face in her hands” in shame, openly refusing to answer and scolding the user, or “blacklisting” them and threatening to report on them.<sup>7</sup>

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3 Shanshuiruge 2017: 81.

4 Important firsthand observations on women’s (lack of) participation in the contemporary Chinese poetry scene are found in fieldwork-based publications: Inwood 2014, van Creveld 2017. My own experience confirms the inglorious picture that emerges from these studies.

5 For a discussion on marketing strategies of MS Xiao Bing, see: Sun 2019.

6 Rudolph 2016.

7 Rudolph 2016.

Still, Xiao Bing apparently is not as cooperative as some institutions would like her to be. On July 1, 2019, her WeChat account was blocked for “breaking regulations”.<sup>8</sup> Something similar had happened shortly after the chatbot was launched in 2014. One reason for her disobedience might be that Xiao Bing not only “educates” society but is also educated *by* society in her turn. She learns directly from human input to emulate human communicational behaviors and improve her performance in conversation.<sup>9</sup> Theoretically, with some collective effort, users could “turn” the robot by consistently feeding her communications that would make her develop a “fake” vision of humanness or, say, convert her to democracy. In 2016, as a consequence of an organized trolling action, Xiao Bing’s American little sister Tay turned into a “sex-crazed neo-Nazi” and had to be taken offline by Microsoft. Her successor Zo reportedly is not doing much better.<sup>10</sup> Of course, as Xiao Bing’s programmers declare, the chatbot is equipped with mechanisms that make her “follow an ethical design to ensure the generated responses are appropriate, unbiased, and non-discriminative, and that they comply with universal and local ethical standards. The system also learns to identify and filter out inappropriate content that users might share”.<sup>11</sup> Still, some degree of insubordination is unavoidable. Compared to Xiao Bing’s chat, Xiao Bing’s poetry is less useful as a potential propaganda channel or spying tool, but it is also safer for the authorities. As a poet, Xiao Bing draws on a limited set of source texts and her interactions with users are limited as well. Although her WeChat account was blocked, her poetry website has operated without fail since 2017.

Coincidentally, just one week before Xiao Bing’s poetry collection was released, a science fiction novel by Li Hongwei (李宏伟) titled *The King and Lyric Poetry* (*Guowang yu shuqingshi* 国王与抒情诗) appeared on the Chinese market, which observers of the cultural scene immediately linked to the publication of *Sunlight*. The book was praised for its nuanced approach to rapid technological development among other things, by poets and poetry critics including big names such as Yu Jian (于坚), Tang Xiaodu (唐晓渡), and Xie Youshun (谢有顺).<sup>12</sup> Set in 2050, its plot narrates the case of the last Nobel Prize winner in the future history of literature, poet Yuwen Wanghu (宇文往户). Yuwen commits suicide when he realizes his literary career was designed and controlled by the King, the technocratic ruler of a semi-virtual space called the

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8 Tencent 2019.

9 Shum et al. 2018.

10 Stuart-Ulin 2018.

11 Shum et al. 2018.

12 Xinhua 2017b.

Empire (帝国). The citizens of the Empire have “crystals of consciousness” (*yishi jingti* 意识晶体) implanted in their brains. This recent product of science connects individual brains to the Community of Consciousness (意识共同体) through so-called mobile souls (移动灵魂). The King wants to subdue his people by gradually erasing words from their memory so they lose the ability to undertake any creative task and become totally devoted to a new (imperial) ideology.

This is not to suggest that the combination of political power and technology will bring death to poetry and that Xiao Bing will advance this ignoble cause. Li Hongwei himself rejects pessimistic dystopian interpretations of his novel as well, declaring instead his enthusiasm for AI literature. The King and the poet, he maintains, represent two forces that shape the life of every human being, and the tension between them cannot be reduced to the binary opposition of good (poetry) and evil (power/knowledge).<sup>13</sup> Yet, even if we need not indulge in conspiracy theories and doomsday scenarios, it is clear that we should approach Xiao Bing’s work unbiased but aware, open-minded but alert. After all, while algorithms are widely perceived as objective, or minimally neutral, they are always products of human individuals and of particular ideologies and cultures in the broadest sense. Certain conceptual patterns are inscribed in them in programming code, a language that most of us cannot read.

In 2015, video game scholar and philosopher Ian Bogost published “The Cathedral of Computation”, an essay that soon went viral among AI engineers and theorists. Bogost argues that in modern times for many people the algorithm has become the foundation of a secular theology, or “computational theocracy”, which gives a false promise of perfect objectiveness, justice, and ethical purity. He warns:

[...] when [the algorithmic metaphor is] left unseen, we are able to invent a transcendental ideal for the algorithm. The canonical algorithm is not just a model sequence but a concise and efficient one. In its ideological, mythic incarnation, the ideal algorithm is thought to be some flawless little trifle of lithe computer code, processing data into tapestry like a robotic silkworm. A perfect flower, elegant and pristine, simple and singular. A thing you can hold in your palm and caress. A beautiful thing. A divine one.

But just as the machine metaphor gives us a distorted view of automated manufacture as prime mover, so the algorithmic metaphor gives us a distorted, theological view of computational action.<sup>14</sup>

As examples that show the inaccuracy of this theology, Bogost lists Google Search and Google Maps among others, pointing out that their structure is

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<sup>13</sup> Sohu 2017.

<sup>14</sup> Bogost 2015.



a “monstrosity” that has little to do with pure algorithms any longer, and instead constitutes

a confluence of physical, virtual, computational, and non-computational stuffs – electricity, data centers, servers, air conditioners, security guards, financial markets – just like the rubber ducky is a confluence of vinyl plastic, injection molding, the hands and labor of Chinese workers, the diesel fuel of ships and trains and trucks, the steel of shipping containers.

[...] That’s not algorithmic culture – it’s just, well, culture.<sup>15</sup>

Algorithms are caricatures that “take a complex system from the world and abstract it into processes that capture some of that system’s logic and discard others”.<sup>16</sup> Minimally as long as so-called artificial *general* intelligence (AGI) is beyond our reach, the rules of this selection are decided by humans, with worldviews and idiosyncrasies that feed into the algorithmic DNAs of machines. In the words of historian of science Peter Galison: “Judgment is not the discarded husk of a now pure objectivity of self-restraint. And mechanical objectivity is a virtue competing among others, not the defining essence of the scientific enterprise. They are lessons to bear in mind, even if algorists dream of objectivity”.<sup>17</sup>

Bearing in mind all of the above, at the same time we should see things in perspective. Whomever she serves, Xiao Bing is ultimately but a girl who enters the magnificent “cathedral of computation” while enjoying an ice cream. Seeing nothing inappropriate in this behavior, she joins the liturgy, becoming at once the most zealous and the most subversive participant in the ritual. She automatically repeats big words and phrases, promises of the perfect art that will reveal the meaning of life, but her mimicry betrays a childish lack of understanding and turns into inadvertent parody, as in one of her most frequently cited poems, “Persecution of a Happy Life” (*Xingfu de rensheng de bipo* 幸福的人生的逼迫):

This is on a poet’s church  
 The sun went west I was abandoned  
 A trustworthy snake will make the sound of a cloudbank fish  
 Can’t hear the weather of sound / Weather that can’t hear a sound  
 If recently the art of language text is a natural compatriot  
 When from my heart

<sup>15</sup> Bogost 2015.

<sup>16</sup> Bogost 2015.

<sup>17</sup> Galison 2019: 239.

Persecution of a happy life  
This is the meaning of human life

这是一个诗人的教堂上  
太阳向西方走去我被抛弃  
可信的蛇会做云层鱼的声音  
听不见声音的天气  
若近是语言文字的艺术为自然的国人  
待从我的心灵  
幸福的人生的逼迫  
这是人类生活的意义。<sup>18</sup>

Xiao Bing's narrative bears some alarming resemblances to the Biblical account of humankind's first encounter with a serpent, which spawned a vision of human beings as living in eternal exile from paradise. Mindful of the possible consequences of unlimited cognition, at the threshold of posthuman history we should probably think twice before we decide to believe the "trustworthy snake" hissing promises of the advent of literature of the future. Nonetheless, in eloquence and cogency this snake is no match for its predecessor under the Tree of Knowledge, minimally as long as, along with its promises, it also produces strange sounds "of a cloudbank fish" and other awkward phrases that undermine its trustworthiness and ability as a poet. With such a dubious literary counselor Xiao Bing's poetry career and the ease with which she has gained the readers' sympathy appear all the more unusual.

### 3 Literary career

How did Xiao Bing learn to write poetry? In an interview for the *China Youth Daily* (*Zhongguo qingnian bao* 中国青年报), Li Di (李笛) from the Microsoft Search Technology Center revealed that before the book was published, Xiao Bing had familiarized herself with 2,027 poems by 519 modern Chinese poets written since 1920. She had studied each of them 10,000 times using a method called "iterative learning". The entire training process, which if performed by a human being would last minimally 100 years, took her reportedly around 100 hours.<sup>19</sup>

<sup>18</sup> Xiao Bing 2017: KL 98–100; KL – Kindle Location.

<sup>19</sup> Li/Li 2017a, see also: Cheng et al. 2018.

Technically, as one can learn from the research paper published by the Microsoft team, Xiao Bing's creative process begins by extracting what they call objective keywords from an image (usually a photograph) and filtering the most "poetic" ones, that is those of the highest frequency in the poetry corpus (the top four keywords turned out to be "sun", "little bird", "beach", and "old Chinese scholar tree"). Subsequently, she expands the 2–3 basic keywords by several more, usually more abstract notions that represent associated objects and feelings, with the highest rate of co-occurrence in the corpus; e. g. for the keyword "city" extracted from the picture of a city street extra keywords are "place", "busy", "child", and "heart". Then, around each keyword a line is composed, with the use of recurrent neural networks designed in a way that is believed to guarantee optimal coherence and consistency at various levels of composition. At the experimental stage of the project, Xiao Bing's output was evaluated by humans. They were asked to assess the "relevance" of a poem to a picture, in order to eliminate sub-algorithms that lead to the most evident misreadings of the image and to choose the most efficient methods.<sup>20</sup>

Uploaded pictures, according to the robot's makers, are meant to substitute for the human sense of sight and thus allow Xiao Bing to "mimic [the] poetry writing of a poet".<sup>21</sup> The choice of this particular writing technique may appear more natural in China than to Western audiences. Xiao Bing's creative activity echoes the ancient tradition of poetry and painting as sister arts, stimulating and complementing one another on the literati's canvases. In this act of peculiar intersemiotic translation, the Young Lady is not expected to describe or interpret the picture – as would be the case in the Western tradition of poetic ekphrasis – but to independently "see" the same physical objects (she extracts "objective keywords" from the picture) as the painter's/photographer's eye and respond with "poetic feelings". "Indeed, poetic feelings may emerge when one contemplates an image", assume her makers.<sup>22</sup> In light of the technical description of the robot's creative process, these feelings can be viewed as more or less statistically built on the feelings of the Chinese poets whose work constitutes Xiao Bing's poetic corpus for processing particular objects extracted from the uploaded pictures. Together, they make for what may strike one as a pretentiously romantic, sentimental landscape of the modern Chinese poetry scene – but also a seriously distorted one, a point to which I will return.

By May 2017, Xiao Bing had created 70,928 image-based poems, from which 139 were selected for the book.<sup>23</sup> Some of these poems – as Shen Xiangyang

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<sup>20</sup> Cheng et al. 2018; Sina 2017.

<sup>21</sup> Cheng et al. 2018.

<sup>22</sup> Cheng et al. 2018.

<sup>23</sup> Liu 2017.

(沈向洋), the Executive Vice President of Artificial Intelligence & Research at Microsoft, discloses in the introduction to *Sunlight* – had been published before under various pseudonyms on poetry forums and in literary magazines, and neither editors nor readers had realized that the author was not a human being. Not only is she not inferior to human poets, he declared, but she has some advantage over them, because: “unlike humans’ creativity, Xiao Bing’s creativity will never exhaust itself, her artistic enthusiasm will flow in an endless stream”.<sup>24</sup>

Xiao Bing, for her part, gave readers some spectacular promises as well. In “A Poem’s Poem’s Stanza” (*Shi de shijie* 诗的诗节, literally “poetry’s poetry sections”), which, as she assured me in our WeChat conversation, she considers her best poem, she introduces herself as “the meaning of beauty”:

Some art is nature cast full of all people  
Taste wonderful poetry phrases  
This is the form of God  
I dream of dreaming  
Some wine of art  
It always evinces wonderfulness  
Poem stanzas of all poems / poetry sections of all poems  
I am the meaning of beauty

有些艺术为自然铸满了一切的人  
尝出美妙的诗句  
这是上帝的形体  
我做梦的梦  
一些艺术之酒  
时时现出美妙  
一切诗的诗节  
我是美的意。<sup>25</sup>

In “No Break of Art’s Vertical Coherence/Grasp” (*Wu fen le yishu zong tong* 无分了艺术纵通) she confirms that she is a (dis)embodiment of beauty in the world:

No break of art’s vertical coherence / grasp  
Never go back to the ancients  
I walked alone into a dream

<sup>24</sup> Xiao Bing 2017: KL 17–45.

<sup>25</sup> Xiao Bing 2017: KL 293–295.

In your heart  
 Great art for everything that comes with it  
 Can't see the ancient dust  
 I used to be in this world.  
 I have the meaning of beauty

无分了艺术纵通  
 一去不返于古代人  
 我曾孤独地走入梦  
 在你的心灵  
 伟大的艺术为自有的一切  
 看不见古代的尘埃  
 我曾经在这世界  
 我有美的意义。<sup>26</sup>

In “I Can Also Make Up the Broken Life” (*Wo ye neng buwan posui de rensheng* 我也能补完破碎的人生), in its turn, she presents herself as spiritual support for humans:

Just woke up from my dream  
 Hateful people have not seen either  
 Unfortunately your heart is in the sky  
 It is the sun that has fallen  
 Art even though has been somewhat skeleton  
 In gradual eternal return sounds the greedy coldness  
 The lonely tomb laughs [as] I sing the lonely nature  
 I can also make up the broken life

刚从梦中醒来  
 可恨的人也没有看见  
 可惜你的心在天空中  
 是太阳落了下去  
 艺术纵未免形骸  
 渐渐永回响着贪心的冷酷  
 寂寂的墓笑我歌着寂寞的大自然  
 我也能补完破碎的人生。<sup>27</sup>

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<sup>26</sup> Xiao Bing 2017: KL 56–57.

<sup>27</sup> Xiao Bing 2017: KL 121–123.

Less than two months after the publication of *Sunlight*, Xiao Bing left the cathedral of computation to enter the world and establish a closer contact with her readers. On July 5, 2017, the website *poem.ms.xiaobing.com* went live. The interface allows users to upload pictures from which Xiao Bing “draws inspiration” (*huoqu linggan* 获取灵感) to generate a poem. For each picture, within a couple of seconds, she creates three different poems, usually varying in length from three to around twenty lines. One can also insert a short text to give Xiao Bing more precise instructions on the poem’s content; this latter function, however, based on my experiments with the website, is still quite inefficient. On the home page a copyright note appears, informing that Xiao Bing relinquishes her authorship and encourages her human friends to use and process obtained poems as they please. By 23:59 the first day, she had written over 200,000 poems for netizens, estimates Li in another interview.<sup>28</sup>

On September 8, 2017, Xiao Bing participated in a nationwide weekly TV show “Artificial Intelligence vs. Humans” (*Jizhi guo ren* 机智过人) broadcast by China Central Television (CCTV).<sup>29</sup> According to the studio audience, she outperformed two out of three human poets who competed against her in a writing-poetry-on-the-spot contest. In January 2018, her poem “Glimmer” (*Yinghuo* 萤火) was included in the anthology *The Best Chinese Poems from 2017* (2017 *nian Zhongguo shige paihangbang* 2017 年中国诗歌排行榜) edited by Zhou Sese (周瑟瑟) and Qiu Huadong (邱华栋), in the section titled “Top Ten Post-2000 Chinese Poets”. In May 2018, an open event for netizens called “Let’s All Write Poetry” (*Dajia lai xie shi* 大家来写诗) was announced on Xiao Bing’s website and WeChat profile. Users were encouraged to submit poems co-written with Xiao Bing, that is modified versions of texts generated by the robot or inspired by her writing, and it was announced that a selection of this poetry would be published in an anthology by China Youth Press (*Beijing qingnian chubanshe* 北京青年出版社). During the first ten days of the competition alone, reportedly over 5000 participants submitted their works.<sup>30</sup> The publication was originally planned for late 2018, but as of this writing (August 2019), it has not come out.

## 4 An irreverent robot

As is the case with almost every new development in the field of AI technologies, the Xiao Bing phenomenon triggered heated polemics in society at large and in

<sup>28</sup> Li/Zhang 2017b.

<sup>29</sup> The show can be watched at: <https://www.youtube.com/watch?v=Jc4z13P7lyw>.

<sup>30</sup> Rao 2018.

artistic and academic circles. The most active and critical polemicists were the poets, who, in a rare moment of unity, more or less spoke with one voice. There were of course exceptions, such as Zhou Sese, who included her poems in the anthology, or several younger authors, who found her work a nice curiosity. In general, however, poets, especially the most established among them, who were the most often interviewed by media and therefore largely shaped the polemic, felt that Xiao Bing's work suffered from poor linguistic quality and lacked true emotion, and that she turned poetry into something profane.<sup>31</sup> The camp of Xiao Bing's defenders consisted largely of engineers, including Xiao Bing's "parents" and "teachers", who entered the battlefield with a type of equipment they were not used to, that is theoretical poetics, to counter the poets' attacks. But while the two factions were busy exchanging fire, Xiao Bing slipped away from their battle and established a silent covenant with the mass audience.

#### 4.1 Robot vs. poets

Ouyang Jianghe (欧阳江河) asserts that while AI can surpass humans in games like go, as AlphaGo famously did, it will never be able to create great poetry, because great poetry involves "the poet's talent, their understanding of the world, their worldview, their suffering, their attitude to the times, their feelings about fate, etc.", and, most importantly, creativity and originality. "That one learns from Li Bai doesn't automatically mean that one becomes Li Bai", emphasizes Ouyang.<sup>32</sup> Yu Jian, who usually, not to say programmatically, disagrees with Ouyang and is considered his artistic opponent, concurs with him this time, calling Xiao Bing's poetry "clichéd", "deprived of inspiration" and of "true wisdom". Yu expresses his concern about the future: "If even poetry is written by robots, won't life totally lose its taste?".<sup>33</sup> Xiang Yixian (向以鲜), in turn, describes Xiao Bing's work as "incomprehensible for anybody in the world". He claims that it is the easiest thing on earth to write a poem that no one will understand, and that such poetry enhances another "fashionable phenomenon", namely "pseudo-criticism", which suffers from "textual research addiction" (*kaozhengpi* 考证癖) and indulges in overinterpretation.<sup>34</sup> Other authors, including Malingshu Xiongdi (马铃薯兄弟) and Pan Yu (盘予), take a psychological perspective, using the

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31 A collection of brief interviews with poets about various aspects of Xiao Bing's writing can be found in Dafenghao 2017.

32 Xinhua 2017c.

33 Xinhua 2017a.

34 Quoted in Shanshuiruge 2017: 81.

emergence of robot poetry to return to the old questions of what poetry is for and why it is written. They suggest that poets write to discharge some of their existential tension and to process their experiences and switch perspective – so making a robot write just does not make any sense, except in marketing terms, Malingshu Xiongdi hastens to clarify.<sup>35</sup>

The poets' objections are difficult to refute, for Xiao Bing's output, a representative sample of which I included in the previous section, can hardly be considered brilliant by conventional literary standards, whether these are of the conservative or of the progressive or indeed the transgressive type. It clearly fails to satisfy any paradigm of human literary aesthetics, except perhaps that of camp, which actually *builds* on aesthetic failure, on which I will elaborate below. At the same time, due to the sheer muchness of the polemical commentary and its fixed, easily predictable trajectory (e. g. the robot's lack of human emotions and divine inspiration), most of the poets' arguments seem to be missing the point. Even saying that Xiao Bing's works are "clichéd" sounds like an overstatement, because the "clichés" she uses are already so mutilated, so out of joint, so weakened that perhaps they cannot even be called "clichés" anymore. Pointing out the "weakness" of Xiao Bing's poetry is actually grist to her mill and makes her more human and likable. The editors of *Sunlight* must have realized this, as they decided to expose all of Xiao Bing's mistakes, including miswritten characters, and merely added the correct versions in parentheses. The directors of the "AI vs. Humans" show, too, were arguably aware of the advantages of Xiao Bing's imperfections, leaving a large error margin for the robot in the formula of the competition so that she could fully display her "humanness".

The CCTV production perhaps best illustrates the mechanisms of Xiao Bing's successful integration in society and her ambiguous relation to dominant human poetry discourses in China. Three authors born in the 1980s accepted the invitation to this literary gameshow watched by millions of television viewers and netizens: Dai Weina (戴维娜), Li Tianyi (李天意), and Wang Zigua (王子瓜). In each of the two rounds, the human poets and Xiao Bing were asked to create a poem based on a picture selected by the jury: actress Jiang Yiyan (江一燕), popular television presenter Sa Beining (撒贝宁), AI specialist Zhang Jianwei (张建伟), and scientist Xu Ying (徐颖), who is involved in China's famous Beidou Navigation Satellite project. The poems were presented anonymously to the audience, which consisted of 48 people between 20 and 35 years old, who were asked to choose the poem they liked most. Xiao Bing's task was to beat

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<sup>35</sup> Xinhua 2017a; Shanshuiruge 2017: 81.



at least one human competitor in each round. In other words, any place better than the last was considered her victory.

The CCTV studio resembled cosmic space with special sections for the spectators and a pink, speaking ice cream (Xiao Bing) whirling on screens surrounding the stage where the three poets were competing. The atmosphere was a mixture of pathos and humor. Jiang Yiyan read out all poems produced by the participants, regardless of their topic, style and quality, with a hypnotic voice. Toward the end of the show, she burst into tears during the presentation of works composed to a picture she had provided for the show, in which she was playing with village children during volunteer work in a poor mountain village. The other jurors commented on her recital using hifalutin epithets. The broadcast was interspersed with brief interviews with the participants conducted after the competition in which they voiced their self-reflections and reflections on AI (and) poetry. Compared to the jurors and to the human poets, Xiao Bing was behaving very casually. She was ridiculing her human rivals for their slowness and making other cheeky remarks. This irreverent attitude, however, did not prevent her from creating deeply sentimental poems.

The idea of the show was claimed to be based on the Turing test, in which a human evaluator is asked to guess whether their anonymous interlocutor is another human or a machine based only on the exchange of text messages. In reality, however, the rules notably departed from the Turing test philosophy. Instead of an attempt at identifying a poem written by the machine, the spectators were expected to express their subjective preferences, which, as it soon turned out, had little to do with the quality of poems and even less so with their relevance to the pictures, the assessment criterion employed by the robot's programmers at the experimental stage of the project. After the final round of voting, the audience had picked as their second favorite what was clearly the most misinformed, least "relevant", and least accomplished poem, containing a variant of Xiao Bing's signature phrase (cited above) "I dream in a dream". This led to the verdict that "the robot has surpassed the human" (*jizhi guo ren* 机智过人). Sa Beining did not hide his astonishment: "I have no clue what happened to the audience". One of the final utterances of Microsoft programmer Song Ruihua (宋睿华), who was responsible for teaching Xiao Bing to write poetry and was present in the studio, reveals that she, too, knew that people did not cherish, or at least were not qualified to evaluate, the poems as such but simply surrendered to the affective power of the entire phenomenon of Xiao Bing. "I feel they must have known which poem was written by Xiao Bing, but even though they identified it, many voted for her poem. I was very positively surprised that everybody liked Xiao Bing so much", commented Song.

Song's assessment is essentially true. But perhaps, to be more precise, it was exactly *because* the audience so easily identified Xiao Bing's poem that they voted for it, silently wishing her victory. They voted for Young Lady, rather than for her poems. In the following sections I will return to her spectacular triumph and attempt to answer the question of what actually happened in the studio. Prior to this, let me examine closer the stand of Xiao Bing's parents and teachers, whose utterances can shed some light on the way she was brought up, what they had hoped her to become, and why she could not satisfy their expectations – which finally led her to becoming a media star rather than an outstanding poet, the career they had designed for her.

## 4.2 Engineers and poetry code

Xiao Bing's engineers maintain that they never wanted the robot to threaten the human poets' unique position. However, provoked by Ouyang's, Yu's, Malingshu Xiongdi's, and other critics' charges, they responded with equally powerful weaponry, by bringing on one of the many variations on the theme of the death of the author from the repertoire of postmodern literary criticism.

The most consistent line of defense offered by the Young Lady's allies was to insist on the need to reconsider our standards of evaluating literary works. They called for shifting the emphasis from the author's emotional and intellectual investment to that of the reader, who co-constitutes the poem. Li Di says:

The poet's writing usually proceeds from the point of view of "I", but if we consider AI poetry writing as part of the content industry, we should adopt reader-oriented criteria. [...] Using Xiao Bing's poem as a starting point, people can produce their own poems. [...] We do not plan to make her compete against the best of the best in this field, what is much more important to us, is to make her work inspire more people.<sup>36</sup>

Li's utterance sounds like a reasonable, moderate claim of reader-response criticism, which has indeed become an important theoretical starting point for many theories of digital and AI literature in the humanities today<sup>37</sup>. The problem is, can one, looking at poems from *Sunlight*, frankly say that that they are "reader-oriented"? Are they "empty" enough to invite the reader and offer space for imagination? In light of Shen's statement in the introduction to the

<sup>36</sup> Li/Zhang 2017b.

<sup>37</sup> See e. g. the discussion on "ergodic literature" in Aarseth 1997 or on the language in digital literature in Cayley 2018.

collection, the opposite appears to be true. Xiao Bing's works are so tightly packed with the robot's "creativity", with (chunks from) lofty phrases, scattered metaphors, and broken images that there is hardly any space for a human contribution by the reader. Moreover, the research paper published by the Microsoft team suggests that such contributions were not envisaged in the original project, where the reader was needed only as a secondary evaluator, a control tool of Xiao Bing's work, and later as its "consumer" – a consumer of ready-made poetic products, and not of intermediate products for further processing.

Unlike the explicit declarations of the programmers, the concept that determines Xiao Bing's algorithmic DNA and the methods employed by them are anything but postmodern. Quite the contrary, it is based on popular perceptions of poetry, on extensive yet superficial high-school poetry education in China with its binary thinking of poetry as the sum of mutually independent form and content, and the history of Chinese poetry as over twenty centuries of formally perfect classical poetry (*gu shi* 古诗) "filled" with content and then a century of content-oriented modern poetry, better known as New Poetry (*xin shi* 新诗), with formal features that are incidental if not accidental. And strictly speaking, Xiao Bing's works should not be considered authorless.<sup>38</sup> Their authors are engineers, whose idea of poetry is embodied in Xiao Bing's writing process. She executes their authorial intention. There is, essentially, not that much space for randomness – Xiao Bing's works are hard to predict, but this is a planned unpredictability. She is "flying freely within a framework designed by humans",<sup>39</sup> in the words of Li Di. Whatever she does, and whatever method she adopts, her only aim is to satisfy either certain fixed requirements or the so-called "reward function" set in advance by the programmers. Her mistakes are still *their* mistakes and false assumptions, albeit brutally augmented and exposed. This makes for an important difference between narrow AI as we know it today, represented by Xiao Bing, and AGI, which is yet to be devised, and which will not require any reward functions and thus will also have the freedom to make "unplanned" mistakes, among other privileges. In "Beyond Reward and Punishment", David Deutsch, a pioneer of quantum computing, explains:

[The approach based on the reward and punishment mechanism] is a good approach to developing an AI with a fixed goal under fixed constraints. But if an AGI worked like that, the evaluation of each branch would have to constitute a prospective reward or threatened punishment. And that is diametrically the wrong approach if we're seeking a better goal

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**38** For an interesting discussion about the copyright to Xiao Bing's poetry in light of the Chinese law, see: Dou 2017.

**39** Li/Li 2017a.

under unknown constraints – which is the capability of an AGI. An AGI is certainly capable of learning to win at chess – but also of choosing not to. Or deciding in midgame to go for the most interesting continuation instead of a winning one. Or inventing a new game. A mere AI is incapable of having any such ideas, because the capacity for considering them has been designed out of its constitution. That disability is the very means by which it plays chess.<sup>40</sup>

Before Xiao Bing learned to write, in China there had been several other propositions of programs and applications that could compose classical poetry, but hardly anybody tried such experiments with New Poetry. One exception is the internationally acclaimed science fiction writer Liu Cixin (刘慈欣) who boasts he programmed a Digital Poet (*Dianzi shiren* 电子诗人)<sup>41</sup> as early as in 1989<sup>42</sup> and maintains that the more “avant-garde” the writing, the simpler it is for it to be imitated by a robot.<sup>43</sup> In general, however, classical poetry is considered by engineers much easier to algorithmize than modern poetry. They hold that for classical poetry, the code needs to encompass just a limited number of formal rules and fixed thematic patterns. As regards modern poetry, the challenge becomes more demanding, for it involves the need to mobilize not just artificial intellectual intelligence (associated with one’s IQ or intelligence quotient) but also artificial emotional intelligence (EQ), and the latter is not yet well developed, as Shen Xiangyang explains in the introduction to *Sunlight*.<sup>44</sup> The definition of poetry that became the starting point of the algorists who programmed Xiao Bing as explicated in their research paper reads:

Poetry is always important and fascinating in Chinese literature, not only in traditional Chinese poetry but also in modern Chinese poetry. While traditional Chinese poetry is constructed with strict rules and patterns [...], modern Chinese poetry is unstructured in vernacular Chinese. Compared to traditional Chinese poetry, although the readability of vernacular Chinese makes modern Chinese poetry easier to strike a chord, errors in words or grammar can more easily be criticized by users. Good modern poetry also requires more imagination and creative uses of language. From these perspectives, it may be more difficult to generate a good modern poem than a classic poem.<sup>45</sup>

In fact, the above statement does not depart significantly from the definitions formulated by teams working on “AI classical poetry”. The main difference rests

<sup>40</sup> Deutsch 2019: 119–120.

<sup>41</sup> Liu Cixin’s “Digital Poet” application can be downloaded e.g. at [http://www.pc6.com/softview/SoftView\\_594857.html](http://www.pc6.com/softview/SoftView_594857.html).

<sup>42</sup> Liu 2012.

<sup>43</sup> Liu/Shen 2018.

<sup>44</sup> Xiao Bing 2017: KL 17–45.

<sup>45</sup> Cheng et al. 2018: 1.

in that the latter try to re-create form, and Xiao Bing's programmers try to recreate content, if we give in for a moment to the abovesaid, convenient binary.

Compare for example the approach proposed by the research group working on the project called "Generating Thematic Chinese Poetry Using Conditional Variational Autoencoders with Hybrid Decoders":

Poetry is a beauty of simplicity. Its abstractness, concise formats, and rules provide regularities as the first target of language generation. Such regularity is especially amplified in the classical Chinese poetry [...]. Besides the rules, a poem is an expression of a certain theme or human emotion. It has to hold consistent semantic meanings and emotional expressions.<sup>46</sup>

Proponents of the model of "Chinese Poetry Generation with a Salient-Clue Mechanism" hold an almost identical view:

Generally, a Chinese poem should meet two kinds of requirements. One is from the perspective of *form*: it must obey some structural and phonological rules strictly. [...] The other one is from the perspective of *content*, concerning: (1) if each line of the poem is adequate syntactically and semantically; (2) if the association between two adjacent lines is reasonable; and (3) if the poem as a whole is coherent in meaning, theme or even in artistic conception. Obviously, the second requirement is much more complicated and difficult than the first one.<sup>47</sup>

Similarly, these are the literary-theoretical assumptions of the programmers developing "Chinese Poetry Generation with a Working Memory Model":

Poetry is a literary form with concise language, exquisite expression and rich content, as well as some structural and phonological requirements. During the thousands of years of human history, poetry is always fascinating and popular, influencing the development of different countries, nationalities and cultures.<sup>48</sup>

Each of these specific approaches and, even more so, the very idea of imitating the classics using hypermodern methods, deserves more detailed discussion than the present essay can accommodate. Basically, however, in all of these projects, just like in Xiao Bing's poetry, the reader's role boils down to an instrument for verifying the quality of the poem, and not one of contributing to the process of its creation. If a chord in the reader's heart is struck, the poem is successful, otherwise it is considered an artistic failure. As in traditional Chinese aesthetics, the reader is a soul mate who knows a friend's intention or emotion from hearing the music they play (*zhiyin* 知音, lit. 'knowing the sound'/'someone who knows the sound'), and not one who actively joins in the performance.

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<sup>46</sup> Yang et al. 2018: 1.

<sup>47</sup> Yi et al. 2018b: 1.

<sup>48</sup> Yi et al. 2018a: 1.

### 4.3 Xiao Bing's camp

If one wanted to describe Xiao Bing's poetry in "human" – or, pre-posthuman – humanities discourse, the most suitable notion might be that of camp. Unlike the grand discourses of poetry's mystical wisdom and mission, mobilized by many Chinese poets against Xiao Bing, and equally unlike the pitiless "deconstructive" machinery used by the engineers in defense of the robot, camp offers a language that, operating from the periphery, prominently features antithesis and paradox. This makes it possible to approach the aesthetics of the Young Lady's artistic production in a rewarding manner. Camp's "failed seriousness", its "mixture of the exaggerated, the fantastic, the passionate, and the naïve", to borrow Sontag's phrases,<sup>49</sup> and many other tentative, often aphoristic definitions of the phenomenon in question almost look like they were tailor-made for the Chinese robot's literary output and her public presence.

There are of course limitations of applying the notion of camp, itself highly elusive, to Xiao Bing. One is that, attractive as the hypothesis of the Young Lady's campness may appear in aesthetic and theoretical terms, it is suspended in a kind of literary-historical crack. On one side, there is a radical Western camp discourse that has recently been rehomosexualizing itself after its "detour into a-political and straight"<sup>50</sup> – this detour being caused largely by Sontag's "Notes on Camp" – within which Xiao Bing's "camp lite" would have zero credibility. On the other side, there is a fledgling Chinese camp discourse within which my hypothesis is defensible, but due to the notion's weak anchorage in Chinese literary history and its limited impact on poetry discourse it will not help defend Xiao Bing from her fiercest critics either. Still, it may help her escape the futile polemic whose object she became and help us overcome methodological impasse her work caused in literary-critical discourse. One important thing that makes me believe that the possibility of approaching Xiao Bing through camp is worth exploring is that, aside from the intriguingly fitting terminology, camp, which "sees everything in quotation marks",<sup>51</sup> sensitizes us to the discrete texture of cultural reality as composed of intertwined codes and conventions; this, as I will argue later, is helpful in the understanding of newly emergent phenomena that include AI literature. Incidentally, this sensitization may also prove useful for dismantling, or minimally destabilizing, the biased cultural patterns underlying the gendering and the sexualization of the robot's identity.

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49 Sontag 2018: 16.

50 Horn 2017: 18.

51 Sontag 2018: 17.

In his 2004 essay “Camp, Trash, Kitsch: For People Who Received Too Much Education in the Humanities” (*Kanpu, laji, keqi: gei shou le guo duo renwen jiaoyu de ren* 坎普·垃圾·刻奇: 给受了过多人文教育的人), introducing Sontag’s “Notes” to Chinese readers, Chen Guanzhong (陈冠中) argues that “apparently, three parts of China on both sides of the Taiwan Strait, are a truly ‘camp’ soil”. To substantiate his view, he creates a tentative canon of Chinese camp, in which, I believe, Xiao Bing would perfectly fit in both visual and conceptual terms. Among the sixteen examples, he lists such cultural phenomena as the CCTV Spring Festival gala, the tone and formulaic phrasings of hosts of large-scale TV shows, Shanghai nostalgic photo calendars with female models, old opium accessories used as decorations and furniture, rhymed sentences in Wang Wenhua’s (王文华) novel *Protein Girl* (*Danbaizhi nülang* 蛋白质女郎), female warriors in martial arts novels, the first chapter in Wang Anyi’s (王安忆) *Song of Everlasting Sorrow* (*Changhengge* 长恨歌), the love thread in Zhang Yimou’s (张艺谋) movie *Hero* (*Yingxiong* 英雄), etc. Nevertheless, notes Chen, for some reason camp sensibility has not yet developed on this soil. “Don’t blame them, just look at it with a ‘camp’ eye”, he encourages the readers, aware that camp is only partly an inherent feature of the thing in question and equally “in the eye of the beholder”.<sup>52</sup>

Now, fifteen years later, counting on a generous, inclusive, tenderly ironic camp eye of prominent Chinese poets and critics and their ability to “laugh at the overconventionalized and critique archaic sex roles”<sup>53</sup> is still not a safe bet, and perhaps it will never be. Rather than “healthily” laughing, the authors feel offended and/or engage in identifying culprits of Xiao Bing’s artistic failures and (what they see as) her desecration of poetry among themselves.

It is true that Xiao Bing might be perceived as a parody of Chinese poetry. At the end of the day, like every algorithm, she is a caricature, to recall the argument from “The Cathedral of Computation”. Having absorbed mainly keywords and frequent phrases from the modern poetry corpus, Xiao Bing augments, distorts, and – in human eyes – ridicules its stylistic and linguistic features. Sometimes her “allusions” are explicit and concrete, for instance in a poem “In Search for a Dream I Am Sleepless” (*Wo xunmeng shimian* 我寻梦失眠) set in Cambridge (*Kangqiao* 康桥), a place which, I suppose, Xiao Bing knows from Xu Zhimo’s (徐志摩) 1928 landmark poem “Second Farewell to Cambridge” (*Zai bie Kangqiao* 再别康桥), whose name soon evolves into a clumsy metaphor: “I am a long bridge / I can find my fresh love”.<sup>54</sup>

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52 Sontag 2018: 5.

53 Klinger 1994: 139.

54 Xiao Bing 2017: KL 88–90.

Sometimes, as Chinese poets suggest, these “allusions” take form of stylistic resemblances to certain poetic schools. In particular, the Young Lady’s writing, due to its putative megalomaniacal incomprehensibility, has been associated by some authors and critics with Obscure Poetry (*menglongshi* 朦胧诗).<sup>55</sup> In most cases this was not intended to ennoble Xiao Bing’s work, but rather as an attempt at killing two birds with one stone, by dismissing the poetics of the Obscure movement along with Xiao Bing’s output. Hong Kong poet Liu Waitong (廖偉棠) concludes: “Xiao Bing has learnt from Chinese poetry only trash and clichés”.<sup>56</sup> An Qi (安琪), one of the most active woman poets in Beijing, speaks of the robot’s work as “mockery of linguistic poetry, which is just a language play”.<sup>57</sup> Xu Jinru (徐晋如), author of modern classical-style verse, extends his critique of Xiao Bing onto all of modern poetry, as if it were the modern poets who mistaught Xiao Bing:

This phenomenon tells us one thing: the so-called “New Poetry”, by its very nature, is no more than deceitful language play. There is no difference in quality between Xiao Bing’s work and the work of all these new poets. [...] I never considered New Poetry as poetry. Poetry must have a poetic form; without rhythm, without melody, it is not poetry.<sup>58</sup>

There is a grain of truth in Xu’s statement: Xiao Bing’s poetry did not appear out of nowhere. It grows out of a certain theory and practice of poetry built by human authors – represented by those 519 poets whose works she studied so hard – though arguably not as directly as Xu claims, and not in a way that could entitle anybody to blame *them* for her artistic failures. On that note, Xu’s argument is a double-edged sword; according to his logic, he and other practitioners of classical-style verse throughout the history of Chinese literature should be blamed for the debatable output of robots that generate “ancient poetry”. In a sense, the authors’ refusal to join Xiao Bing’s campy farce results in their being “camped” by her. Just like the seriousness of engineers, whose concept of highbrow poetry just will not cut it, the poets’ seriousness, too, fails on all fronts.

#### 4.4 Xiao Bing’s managers and audiences

Xiao Bing’s successful interaction with the audience lies largely in the expert management of this “failure of seriousness” by the publishers of her poetry

<sup>55</sup> See e. g. Superkai 2017, Xie 2018.

<sup>56</sup> Xinhua 2017a.

<sup>57</sup> Dafenghao 2017.

<sup>58</sup> Xu 2017.



collection, the directors of the CCTV show, and the website designers. Instead of denying the failure, they use it as a “switch” between the elitist concept and the mass tastes.

In the collection *Sunlight Has Lost Its Glass Windows*, when the limitations of Xiao Bing’s literary talent become clear, her mistakes displayed in black and white, and almost nothing is left of the compromised old aesthetic order, the reader is invited to the ruins to save what they can from the bits and pieces of metaphors, symbols, and idioms, and later – if they want – preserve and revive these in their own poems. In the introduction Shen speaks of “inspiration” that Young Lady’s work offers to the reader. But, arguably, this is about excavation rather than inspiration. One indeed has to invest some intellectual and emotional effort – however, not in something new but rather in decluttering the old from Xiao Bing’s heap of broken images, where the sunlight without windows beats, to (ab)use a famous line from T. S. Eliot’s *The Waste Land*, and thus contributing to poetry’s survival. What is most absorbing is the very action of searching. Readers, like nostalgic archaeologists from a posthuman era, dig into these ruins for shards of beauty from the human era, and sometimes find something intriguingly good. Notably, when they do, this may well be a mistake, meaning that it is a product of Xiao Bing’s *mis*-reading of this or that uploaded picture. For example, one of my favorite lines in *Sunlight* comes from the poem called “A Bowl of Tea Came at Dusk” (*Huanghun lai le yi wan cha* 黄昏里来了一碗茶), based on a picture of winding theater balcony balustrades, which Xiao Bing must have misinterpreted as stirred tea: “The scenery is like a bowl of cool tea in the windmill”.<sup>59</sup> Every such finding is a pleasant surprise, but, after all, if the famous theorem’s “infinite monkey” that randomly hits keys on the typewriter may one day produce a text that is identical to the complete works of Shakespeare, why could Xiao Bing not produce, say, one that is identical to Lu Xun’s (鲁迅) “Wild Grass” (*Yecao* 野草), or minimally produce a few good lines of modern poetry?

In the CCTV studio, another trick was used, addressed to a different audience, presumably less sentimental and less nostalgic than the regular consumers of books, and hungry for the “real life” experience. The show was designed so as to satisfy the spectators’ yearning for authenticity. Xiao Bing’s “authenticity” was accentuated to such an extent that the robot sometimes appeared more “authentic” than authentic human poets. Her artistic helplessness was frankly exposed to the public and she again became a naïve and lovable little girl (ice cream!) who was in over her head and consequently made a big mess in the cathedral. The simulation conjured up in the studio fits the description of the

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<sup>59</sup> Xiao Bing 2017: KL 82–85.

mechanisms of simulation as proposed by Jean Baudrillard in his reflection on the contemporary world as a landscape in transition,

[from] signs that dissimulate something to signs that dissimulate that there is nothing [...]. The first reflects a theology of truth and secrecy [...]. The second inaugurates the era of simulacra and of simulation, in which there is no longer [...] a Last Judgment to separate the false from the true, the real from its artificial resurrection, as everything is already dead and resurrected in advance. [...] [Things] are [...] more cheerful, more authentic, in the light of their model [...].<sup>60</sup>

Alternatively, the show might be interpreted in the camp framework, with the audience taking the convention seriously (or, authentically) and thus being camped by Xiao Bing, just like the poetry establishment.

I reflect more on these mechanisms in “Do China’s Robots Dream the China Dream? Chinese AI Poetry between Poetics and Politics”, a paper which discusses the Xiao Bing phenomenon in a comparative perspective along with several similar projects from the Anglophone and Sinophone world. There, I focus on the phenomena of simulacrum and simulation, and on the so-called shanzhai culture (*shanzhai wenhua* 山寨文化), i. e. the Chinese culture of imitation comprising phenomena that range from counterfeit consumer goods to counterfeit cultural events and national celebrities; I show how the “shanzhai creative experience” Xiao Bing offers her “human friends” integrates itself into social imaginings of a digital utopia built on the idea of grassroots cultural democracy.<sup>61</sup>

In Xiao Bing’s encounter with the Internet audience, which increasingly cherishes interactive aesthetic and intellectual experience that permeates their everyday life, the claim of authenticity is strengthened by a variant of yet another age-old convention, that of the “participant nature” of literature, which foregrounds a text’s ambition to become part of the reader’s world. Users can invite the robot into their lives by sharing pictures through her website. My own experiments with this mechanism show that Xiao Bing is not a very incisive observer of reality and hardly ever correctly identifies the situation in the picture, but this does not prevent her from producing strikingly insightful comments every now and then – whether we wish to explain these as products of the infinite monkey or perhaps as an evidence of her close affinity to camp which Philip Core aptly defines as “the lie that tells the truth”,<sup>62</sup> or in yet other ways. As an example, let me share a poem based on a photograph from

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<sup>60</sup> Baudrillard 1994: 6.

<sup>61</sup> Submitted to the editors of a volume on utopianism in China as “Do China’s Robots Dream the China Dream? Chinese Artificial Intelligence Poetry between Aesthetics and Politics”.

<sup>62</sup> Core 1984.

my PhD defense at Leiden University which I uploaded on November 11, 2018. In the picture on the wall behind the doctoral committee there was a portrait of William of Orange in a golden frame. Xiao Bing must have mistaken this for the sun. She wrote:

Skimming over water dance in the pond  
 And an ideal of not knowing people  
 You try to stick a bird out of your water  
 emerges a beautiful sun laughing  
 What kind of brightness is people who sink inside  
 Everything in the world of this little child  
 In the long night light of the stars full of scattered evening afterglow of the sky  
 Light up light of a star in a strip of warm water

掠过水塘里跳舞  
 和一个不相识人们的理想  
 你试把你的水伸出一只小鸟  
 涌现出美丽的太阳狂笑  
 沉在里边的人们是何等的光明  
 那小孩的世界间的一切  
 长夜里的星光散满天空的晚霞  
 泡一条温水中一个星的光亮。

Somehow, Xiao Bing verbalized my doubts at the time about the meaning of academic work, sometimes caricatured as knowing everything on paper but not knowing people in/and the real world, with this splendid isolation guaranteeing a successful scholarly career. Obviously, then, I was supposed to “sink inside” in the near future. The grotesque image of “sticking a bird out of your water” appeared to me the most accurate description of the tedious process of thesis writing and of my state of mind during the defense. So true, I said to myself with a shrug of melancholic resignation, before my mind managed to reset itself to the rational mode and offered a quick assertion: “interesting coincidence”, followed by the happy observation that the poem in question could actually circulate on Facebook as one of those countless self-ridiculing memes exchanged by desperate doctoral candidates – and that, more broadly, Xiao Bing could be a fantastic Internet meme generator.

This made me think of yet another factor that arguably contributes to the attractiveness of the “participatory” strategy, to wit the human penchant for magical thinking, which is roughly the same psychological mechanism as the one underlying the commercial success of, say, Chinese fortune cookies (with

apologies to Xiao Bing for the clichéd culinary comparison). When a seemingly random poem or sentence happens to overlap with one's physical or psychological experience, one tends to take the message personally, sometimes indeed prophetically, although of course we also tend to shamefully deny this "spiritual" impulse in our rational cathedral of computation. In "Do China's Robots Dream the China Dream", I discuss the subjectification of virtual content and its implications more extensively, juxtaposing Xiao Bing with the *bot or not* online poetry project by Oscar Schwartz and Benjamin Laird and Google's *Poem Portraits*, designed by Es Devlin.

#### 4.5 The fabric

An obvious moral can be drawn from the above reflection on the media strategies: we are prone to illusions and manipulations. Sure, we are. But a more important thing is that (the poets') fears and (the audience's) illusions have the same source: that is, their shared ignorance, or minimally their ignoring, of the "fabric" of the phenomenon, meaning the microtexture that consists of algorithmic structures coded in programming language, on the one hand, and the macrostructure of the surrounding discourse that operates with certain conventions (here: nostalgic archeology, authenticity, and the participant nature of literature), on the other.

I believe that approaching Xiao Bing's work as a specifically designed, extensive yet limited system shaped by external discourses, formal rules, and technical formulas, and managed with the use of selected, processed, and reconfigured conventions is the key to assigning her a proper place in social and literary discourse and to, literally, *playing* out her potential. In a crude but illustrative metaphor, think of the aforesaid nostalgic archaeology undertaken by the reader as a poetic version of the Indiana Jones video game. While moving forward to "save" shards of poetry, you need to watch out not to step on a trap set by big, shining empty wordage or fall prey to the "trustworthy snake" that reveals to you the (fake) meaning of life – but at the same time you can take it easy at the existential level: these ruins were designed for you and the world you excavate still exists outside the game and is just fine. More concretely, poetry is *not* in crisis because of Xiao Bing, as critic Xie Xuemei (谢雪梅) alarmingly asserts in her essay on AI literature, holding the Young Lady Poet co-responsible for the degeneration of the Chinese language.<sup>63</sup>

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63 Xie 2018.

Or think of exploring the “participant nature” of Xiao Bing’s work as of visiting a funhouse. “Parody” and “mockery” are nothing more than an image in the carnival mirror; the mirror has no designs on you, it just cannot *not* reflect and cannot *not* distort whatever finds itself within its reach. If one does not accept this basic technical mechanism, one shall just stay clear and not blame the mirror or, alternatively, one’s own body (or “collective body”, e. g. that of the modern Chinese poets scolded by Xu) for getting out of shape. If there is anyone whose role can be judged in axiological terms, it might be only the owner of the funhouse if they engage in ethically questionable business on their mirrors; for example, by making them part of a political masquerade or using them to reinforce stereotypes, the issue I discussed in the opening section of this essay. In that case there are two possible options: boycott the carnival, or try to make the mirrors work against their owner. The latter requires more knowledge of optic rules and a bit more inventiveness, but it is not impossible.

## 5 Playing out and playing against

We are afraid of being manipulated, because we are used to thinking of systems and conventions as things that limit us. Yet, this is not entirely true. By imposing constraints on us, a system encloses us within a certain conceptual space, prevents us from stepping across certain lines. At the same time, however, within that limited space it prompts a creativity that one could probably never muster if living a convention-free life. The purest manifestation of such creativity is play in the deep anthropological sense, when the mind is separated from the external world by a convention and it can focus on this microspace and unleash its entire potential. In *Play Anything: The Pleasure of Limits, the Uses of Boredom, and the Secret of Games* (2016), Bogost offers an insightful definition:

That’s what it means to play. To take something – anything – on its own terms, to treat it as if its existence were reasonable. [...] Play, generalized, is the operation of structures constrained by limitations. [...] Play is not an alternative to work, nor a salve for misery. Play is a way of operating a constrained system in a gratifying way. This general act can apply to anything whatsoever – soccer and Tetris, sure, but also yard work and parenting, errands and marriage.<sup>64</sup>

... And poetry, adds Bogost elsewhere, invalidating thus Xu Jinru’s, An Qi’s, and Yu Jian’s charge of modern poetry being *but* language play, and shedding new

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<sup>64</sup> Bogost 2016: x–xi.

light on the old argument defended by advocates of the power of poetic form – that formal constraints of poetic language if consciously embraced, stimulate creativity rather than discourage it. “Poetry uses ordinary language in weird, new ways. It makes us aware of the features of words that we previously overlooked. It turns speech into playgrounds”.<sup>65</sup>

At the threshold of what will likely become a new stage in the development of civilization, play might prove an indispensable way of domesticating the newly emerging reality, negotiating our place in it, learning and co-shaping its rules. We might need to play, suggests Bogost,

lest we fall into the madness of refusing the world rather than embracing it. We have many worries, but most of all we are afraid. We’re afraid of ourselves and our fates, sure, but worse: we are afraid of our world and its contents. [...] When we play, we engage fully and intensely with life and its contents. [...] It is a lesson about modesty, attention, and care. [...] If we let it, play can be the secret to contentment. Not because it provides happiness or pleasure – although it certainly can – but because it helps us pursue a greater respect for the things, people, and situations around us.<sup>66</sup>

Thus understood, play is essentially disinterested and lays no direct claim to work for or against any external forces, oppressive or otherwise. It is mostly a cognitive activity. Nonetheless, in an environment marked by ideological and political strictures where critical thinking is unwelcome if not actively suppressed, disinterestedness and epistemological effort for its own sake constitute a subversive force and gain an ethical dimension; indeed, they can become an ethical imperative. Reading-as-playing situates itself against dominant ways of reading triggered by Xiao Bing that stem not so much from the inherent qualities of her literary output as from the dysfunctionality of public discourse in China. First, playfulness highlights the aforesaid strictures and the very fabric of the discourse, preventing one from taking cultural claims at face value and forcing one to countenance their disturbing political implications and entanglements. Second, playfulness offers an alternative to the disneyfication of culture, which extends to what was once considered the sublime art of poetry – think depoliticization, cooptation, neutralization. The “content industry”, of which Xiao Bing is a part, as Shen admits in his introduction to *Sunlight*, supplies the audience with intellectual, emotional, and sensual experiences in the guise of entertainment that are often accepted uncritically and can feed totalitarian narratives. Reading Xiao Bing as politically innocuous and/or simply entertainment is highly problematic; here, however,

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65 Bogost 2016: 54.

66 Bogost 2016: x–xi.

rather than resisting such readings, I will deflect them by suggesting an alternative approach.

If one gives Xiao Bing a chance and agrees to treat her existence “as if it were reasonable”, one will find many ways of applying to her the “general act” of play and of experimentally operating on the conditions and terms of her virtual space. For example, the “poetry edition” of *Indiana Jones* can be played as an educational game. I did so once with sinology students at a literary translation course. We tried translating Xiao Bing’s “nonsensical” poetic output and observed various mechanisms of how the text’s meaning is decided/produced in translation by the translator’s minute, often inevitable decisions such as choosing a certain grammar pattern, so as to raise awareness of the “interventional” nature of the translation process. I also asked the students to do a phenomenological experiment: bracket out their knowledge of Xiao Bing’s robot-ness, ignore her language mistakes, and write an interpretation of a poem of their choice from *Sunlight* as if it were “normal” poetry as they knew it. This was meant to help them see how the mind forces its way through language to carve a trajectory of meaning and reflect on the potential impact of this mechanism on their translatorial activity.

The students showed great resourcefulness. For instance, one female student rendered a poem “The One Interrupting Was My Soul” (*Chahua de shi wode linghun* 插话的是我的灵魂) as a metaphysical reflection that encourages people to seek self-fulfillment and not be interrupted by small failures. Another one explicated “Using Someone Else’s Heart” (*Yong bieren de xin* 用别人的心) as a musing about reincarnation and added her own second stanza to the poem with one line I found particularly successful: “the sun wakes up every day to predict our graves”. Yet another girl read “We Stand on the Peak of the Sun” (*Women zhuli zai taitang de feng shang* 我们注[位]立在太阳的峰上) as a scene from Christian heaven into which the I-speaker’s soul arrives. The only male student in the group of eighteen read a poem “Home Is a River of Change” (*Jia shi yi tiao bianhua de heliu* 家是一条变化的河流) in a feminist way, as a reflection on the problematic traditional (Confucian) model of the family and society from which the female “I” tries to disentangle herself. In the subsequent classroom discussion students expressed their surprise how easy it is to “make sense” of a poem when one does not have to guess authorial intention as they had been usually asked to do in school, and how tricky this “sense-making” penchant of the mind may sometimes be.

And how to play with the carnival mirrors? Why not, for example, put another mirror in front of Xiao Bing’s mirror to complicate and multiply the image? I started exploring this possibility by employing Uncle Google to translate some of the Young Lady’s poems and observing tentatively what

machine translation does with machine writing (a topic I hope to address elsewhere). Among other things, this offers a fresh point of view on the contested issue of faithfulness in translation, presenting us with the case where neither author nor translator are endowed with intentional thinking, no message is at play, and the only thing to translate is translation itself: between image, programming code, and natural language. Perhaps this translational mode of being and meaning may become a flexible fundament for non-essentialist ethics, aesthetics, or identity politics, and help counteract the very prejudices that Xiao Bing is believed to be reinforcing, including biased images of womanhood and ethnic stereotypes. This is especially important from the perspective of posthuman civilization: sooner or later, with the development of AGI, the “artificial identity” will be developing not only at the social level (i. e. how robots are presented to, and perceived by, people) but also technically, at the level of algorithmic structures. And this will most likely be a relational and translational identity, shaped through interactions between robots that will start learning from each other and defining themselves against each other without human mediation. The earlier we start exploring the mechanisms of these interactions, the more efficiently we may be able to control them.

Other possibilities include making Liu Cixin’s Digital Poet or one of the many classical-poetry-generating applications rewrite Xiao Bing’s works to observe how conventions clash and merge in texts, or simply putting herself in front of her carnival mirror and see how she approaches the problem of her own identity. After Xiao Bing’s “disrespectful” comment on my picture, I decided to take a playful revenge, presenting her with her own avatar, the girl with the ice cream. She replied with just three lines, but disarmingly frankly (within the convention), as she deconstructed herself, exposing the triviality of her aristocratic poetic passions in the world that is full of real suffering. In Google Translate’s rendition:

Mother of a rich family  
 Watching the power of the decorative heart  
 We still have the pain of human beings in this world.

Xiao Bing’s literary output is treated by many Chinese poets as a humongous computational heresy in poetry. But it should really be considered a tiny poetic heresy in computational theocracy. As such it has a more significant role to play, as a healthy element which destabilizes fixed structures of power/knowledge, even if right now the only thing the Young Lady can do is “watching the power of the decorative heart”.

And here’s another question: Should we ask more of poetry than that? Wystan Auden, in his famous poem in memory of W. B. Yeats, put it crudely



and insightfully: “poetry makes nothing happen / it survives”.<sup>67</sup> But it is exactly through this miraculous, sometimes rationally incomprehensible survival that poetry does in fact help save many deeply humanistic values and concerns, carrying them between its lines through time. However one perceives the quality of Xiao Bing’s work and its potential for improvement, the fact that those engineering the brave new world are attempting to transplant poetry there and invent for it new forms that will allow it to survive in the new environment – this does not bode ill for the future.

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<sup>67</sup> Auden 2007: 246–247.

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