

Future of Chinese Network Literature under the Background of Artificial Intelligence

Jing Guo^{1, 2, a}, Jinzheng Lu^{3, b}

¹School of Humanities and Social Science, University of Science and Technology of China, Hefei, 230026, China

²School of Literature and Arts, Southwest University of Science and Technology, Mianyang, 621010, China

³School of Information Engineering, Southwest University of Science and Technology, Mianyang, 621010, China

Email: ^apureskystar@163.com, ^blujinzheng@163.com

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Abstract: Artificial Intelligence (AI) technology provides infinite possibilities for the development of Chinese network literature. With the help of AI, many new phenomena may appear in the field of Chinese network literature. Firstly, the mode of man-machine interactive may become a universal phenomenon and become the best mode of production. Secondly, the mode of Private Literature Customization is likely to flourish. Thirdly, the changes brought by AI technology are not only in the external creative environment, but also in literature content creation, which will provide greater possibilities for the emergence of new literary styles. In addition, AI technology has also put forward many unprecedented new topics in the field of Chinese network literature. The conflicts between technology-oriented and literary aesthetics, the contradiction between consumer culture orientation and artistic character have been existed for a long time. Meanwhile, the issues related to intellectual property in the world of network literature under the background of intelligent writing are also becoming more and more complex. All these need the literary circle, the cultural circle, the science and technology circle and the relevant national cultural supervision department to coordinate, supervise and encourage each other, to accurately feel the pulse of online literature consumption taste, and to flourish the online literature market with Chinese characteristics.

1. Introduction

With the arrival of the fourth revolution of science and technology, human beings have entered the era of Artificial Intelligence (AI). The development and application of intelligent products are not only becoming popular in the fields of agricultural production and industrial production, but also in the field of artistic production. Robot composing, robot painting, robot playing, robot hosting, robot writing and so on are gradually familiar to human beings. AlphaGo's stunning victory over top human chess players instantly put AI technology on the public agenda. People are concerned about whether AI technology will make more people laid off and whether human beings will be pushed out of the stage of history by robotics. In 2017, Shaogong Han, a Chinese writer, published an article entitled "*When Robots Establish Writers' Association*". In this paper, he talks about the influence of AI technology on the author's creation. He believes that intelligent writing can only make a difference in stereotyped writing with patterns and patterns, but compared with the frontier exploration of literature, intelligent writing can only be a follower and duplicator in the "second echelon"[1]. In the future, AI writing will put a lot of low-level copycats out of work, but the truly soulful writing will not be replaced by futuristic machines.

Chinese Network literature, as a combination of computer Internet technology and literature, was once regarded as an "anomaly" in the field of literature. It has passed 20 years with all kinds of disputes, and gradually moved from the edge of the literary to the center with the booming network

culture industry, which attracted more and more attention from experts and scholars. Nowadays, the concept and the basic characteristics of network literature are still in a constant state of controversy. Industrial 4.0, with AI as its core, are approaching quietly. It is certain that Chinese network literature will face more unknown challenges in the future. In the next few years, how will the Chinese network literature develop under the influence of AI technology and what new issues will be faced will greatly attract people's attention and more and more people will participate in the discussion of these new topics.

2. Expectable Future Network Literary

2.1 The Best Literary Production Mode: Man-Machine Interactive Production

Nowadays, technological forces are gradually changing people's travel way, consumption behavior, work form and occupation type, and some mechanical and inefficient artificial behaviors are gradually replaced by machines. With the increasing popularity of intelligent technology, people who are interested in the field of literature can't help asking: what will the literary world look like in the future? Will writers be replaced by intelligent machines? At present, scholars have reached a consensus that the artistic, human-centered and touching works will not be replaced by machines, that is, AI technology will not lead to the death of the author. But it is also recognized that AI technology will play an important role in typified writing. Even some scholars make an optimistic judgment on the future literature from three aspects: the persistent development of future technology, China's mainstream policy orientation and the preference of commercial capital injection. They think that "intelligent literature" may become one of the three forms of future literature, which develops in parallel with science fiction literature and network literature [2]. At present, the development and application of intelligent literature has been highly valued by the Chinese government and private capital. On June 30, 2018, the founding conference of China Intelligent Writing Industry Alliance was held in Beijing. The Shenggu, located in Hefei, was supported by the Ministry of Industry and Information Technology. It will integrate the leading enterprises in this field to form an industry alliance and promote the development of the project of "Intelligent Writing", relying on the industrial mechanism jointly built by the Ministry and the resources of the national industrial base. I believe that in the near future, the development of intelligent writing system will get greater development.

Intelligent writing system is based on Expert Database and Machine Learning technology. It stores and analyses a large number of artists' works, finds and extracts regular features, and then converts them into quantifiable values. Through the analysis of the values, it establishes a set of operable production mode of artistic products, and finally reorganizes it. This kind of system has the characteristics of low cost and high yield, which is helpful to relieve the heavy pressure of network literature writers. However, in the final analysis, the intelligent writing system only reassembles and deforms based on the existing intelligent materials of human beings, and its production mode is only a primary simulation of the achievements of human civilization. Moreover, many "languages" in the field of computer research are just metaphors. So computers do not possess the language acquisition ability of human beings in experiential activities and cannot grasp the rules of human language [3]. Therefore, the intelligent writing system, as an artificial creation and intellectual product of human beings, can only be operated according to specific decoding procedures and lacks the creativity required by artistic creation. This determines the aesthetic limit of AI, that is, it cannot achieve the same creation as human beings [4]. To sum up, intelligent writing system can only play an important role in typed writing with strong routine and heavy pattern. But if we want to make a breakthrough in the article and realize the infection and shock to human soul, we need to rely on the strength of human writers. Looking to the future, human-computer interactive writing will be more conducive to giving full play to the respective advantages of computer intelligence and human intelligence, achieving a great leap forward in the development of literature, so that human beings can obtain the greatest benefits in the production of spiritual products in the intelligent age.

2.2 Private Literature Customization is Likely to Flourish

Private Customization refers to customization according to user's needs and satisfying user's personal experience. In the field of clothing, food, housing, transportation and other services, it has already become a common way of consumption. Network literature was born in the network space with UGC (User Generated Content) as its typical feature, which actually constitutes a network community. The relationship between the author and the reader in the community breaks the single relationship in traditional literature, and replaces it with the reader's participation in the author's creative process, creation content, character type and work style and other contents. Free and accessible communication between readers and authors makes it possible for private customization of online platforms. In 2017, Private Literature Customization emerged quietly on the network platforms. A novel order appeared on an online platform: “the story takes place in *the Story and the Stone*, protagonists are Jia Cong, a prince, a young man and a young lady with a higher status, the key word is “back attack”, and the outline can be discussed in detail... “. In the order comments section, several writers showed an interest in this imaginative subject. If the writer produces a work that satisfies the publisher, the list can be successfully concluded. Not long ago, Peking University Online Literature Forum launched the “beep-tap” section to provide readers with similar novel customization services [5]. Nowadays, Private Literature Customization of network literature mainly includes the following aspects: the type of works is original or peer, the style is criminal investigation, romance or swordsman, etc., and then with a few plot keywords or provide plot trend, the length is mainly short and medium stories. The process of “customization” is generally usually that the reader puts forward the reading demand, the writer takes the order, and the reader pays the bill after the article is satisfied [6].

The uniqueness of private customized products determines that human creation cannot meet the demand of large quantity of orders. This seems to be the bottleneck of the development of private customization of online literature. However, facing the future, with the improvement of intelligent development technology, readers' requirements for characters, plots, literary style and other elements can be completely realized through specific algorithms and intelligent programs, and large-scale literature production of customized orders may become a reality. At the same time, Private Literature Customization is in line with the psychological needs of modern human beings to be self-centered and to publicize their individuality. Under the premise of the possibility of future technology, the mode of private customization of literature may have a broader market.

2.3 New Literary Styles Will Be Born

Literature is a way for human beings to express their feelings and emotions. With the changes of historical environment and social production, different types of literature will be born in different historical periods and have their own literary types that occupy the central position. Just as poetry, as an ancient literary style, once flourished in the Tang Dynasty in the Tang Dynasty, and then its central position was gradually replaced by fiction. The greatest contribution of contemporary network literature is typified literature. With the development of intelligent writing system, Typical Literature will have a more vigorous development both in quality and quantity. When the same type of works are overwhelming, the probability of emergence of new literary styles will be greatly enhanced, just as the birth of camera promoted the transition of western painting from concrete art to abstract art. A large number of typified literature filled the literary world is bound to lead to a new turn of human aesthetic tendency, A large number of typified literature will inevitably lead to a new turn in human aesthetic tendency, which will stimulate and create a new type of literature to meet the needs of social aesthetics.

Artificial intelligence technology will not only bring about changes in the mode of literary production, but also have a fundamental impact on literary content creation from external environment stimulation and other factors. Just as Walter Benjamin said: “new technology, new mode of production and consumption will create a new way of life, which will have a fundamental impact on literature” in *The Art Works of the Age of Mechanical Reproduction*. Wang Yonggang, CTO of China Innovation Workshop, once said: “The birth of artificial intelligence is the first and

probably the last time in human history. Human beings can effectively communicate with a different form of wisdom, and even work together to create new literary and artistic content.” [7]

3. The Dilemma of Future Network Literary

3.1 Conflict between Technology-Oriented and Literary Aesthetics

Intelligent writing is the product of the development of computer science. The idea behind it is to realize literary production technically. Literary creation is a complex activity that integrates the writer's mind, inspiration, passion and culture. But in intelligent writing, these multiple factors are mechanically replaced by cold procedural thinking. The diversity, complexity and richness of literature are stipulated on the road of standardization, typification and stylization. The aesthetic feeling of learning is transferred to intelligent technology. Obviously, in the intelligent writing system, technology-oriented transcends the writer's life consciousness. The ideas that literature seeks, the images described, the use of language and the arrangement of the form paragraph are all included in a set of technological procedures. Literary creation is at risk of being reduced from the creative and spiritual activities of the writer to the mechanical and technical activities.

Once technology-oriented occupies a dominant position in the field of writing, it will become the focus of attention for writers to develop excellent writing software. It will become normal for writers to abandon their writing abilities such as personal cultural accumulation, aesthetic accomplishment and language literacy. People will rush to buy high-quality and expensive intelligent writing software instead. Whoever has a large amount of capital can buy and develop excellent writing software. Once technology is combined with the market, it will cause great inequality. Corporate consortia with capital advantages may become monopolistic in the field of writing.

At the same time, once people's daily life, spiritual production and other fields are dominated by technology-oriented, human beings will eventually fall into the abyss of “systemic stupidity” predicted by Bernard Stiegler, a French philosopher. In the era of AI, human learning ability is in danger of being swallowed up and destroyed by machine intelligence. There was a time when humans had the ability to remember the phone numbers of many of their friends and family, but after getting used to cell phones, our ability to remember phone numbers faded away. AI technology is becoming more and more popular, and the fact that human beings “become foolish” has occurred systematically. Once “stupidity” becomes a common phenomenon, technology-oriented will replace human aesthetics or become indisputable one day.

3.2 Contradiction between Consumer Culture Orientation and Artistic Character

Since the birth of network literature, capital operation and consumer culture have been accompanied by it. With the influx of AI technology, their influence on online writing will be more significant. With the help of AI, private literature customization can greatly meet users' aesthetic needs and unique reading tastes in the future. However, how will the creator's cultural responsibility be embodied when he blindly conforms to the user's taste and customizes the delicious meal? What will the character of the works present? The future is uncertain, but it can be imagined.

In the field of network literature, the consumption mode of paid reading has been quite popular. In 2002, qidian.com initiated the paid online reading mode. The website usually provides some chapters for readers to read for free. When the clicks increase, the works will be transferred to the VIP area. Readers need to pay to read the follow-up content. The payment methods include subscription, reward and so on. In the future large-scale private customization mode of literature, the consumption attribute of literature will be more prominent in the form of writers completing readers' orders and receiving payment after being recognized by readers. In the traditional consumption of commodities, consumers are dissatisfied with commodities and refuse to pay, which will eventually happen in the world of network literature. The commodity consumption attribute of literature will become more and more obvious. The instant consumption relationship between the purchaser and the supplier inevitably worries about the future literary character. In order to get the reward after hard work, the supplier may blindly cater to and meet the appreciation needs of the customizer and willingly listen to

others. In the long run, the writer's creation mentality is feared to be numb by money, his creation taste is feared to be pulled down, his literary talent is feared to be vanished, and he becomes like a frog in warm water, and it is difficult to jump to the ideal literary height. At that time, the number of people who “playing” with literature may double, and literature may be completely pulled down from the altar and become a word game without high ideological level.

3.3 Intellectual Property Issues Are Becoming More and More Complex

The promotion of social civilization has promoted people's awareness of safeguarding their rights, and people's awareness of intellectual property protection is also increasing day by day. As far as the network literature is concerned, the problem of infringing the intellectual property rights of writers has become more prominent, and plagiarism has been recognized as one of the more difficult problems to solve.

In recent years, network fiction has obviously become a plagiarized “disaster area”. The original works adapted into popular TV series, such as “*the journey of flower*” “*The Princess Wei Yang*”, have been exposed to suspicion of plagiarism. Early network novel plagiarism is mainly to extract good words and sentences. Nowadays, network novel has developed such ways as “manuscript laundering” and “melting stem”. “Manuscript laundering” is copying the skeleton, changing the background and details of the novel. “Melting stem” refers to plagiarizing other people's story lines and plot patterns. These two ways make it possible to produce a large number of products in a relatively short time, thus becoming the main type of network plagiarism. With the help of AI technology, plagiarism will become easier and easier. “A few months ago, Jinjiang literature website, which is one of the strictest website fights against plagiarism, received a report from netizens that a well-known online novel author signed by the website was suspected of plagiarism. After investigation by the website, it was concluded that the author used a lot of material from the writing software, many of which were fragments of works by well-known authors “[8]. With the increasingly sophisticated development of intelligent software and the increasingly large database resources of intelligent software, plagiarism without the writer's aware may become the norm in the near future. How to regulate the possible problems in the use of intelligent writing software will become a common topic for software engineers and literary experts and scholars to discuss.

Moreover, Intellectual property problems caused by the development and application of intelligent writing software are far more than that. Does works produced by intelligent writing software belong to technology developers or to intelligent machines? Can intelligent machines own works as independent subjects? If intelligent machines can own the ownership of works, how will the ownership of interactive works be determined? After the intelligent authoring program is sold, does ownership of the creation transfer from the technology developer to the program purchaser? If so, how to identify similar works created by different purchasers of the same smart program? How to identify plagiarism in human-computer interactive writing? As intelligent writing becomes common, intellectual property issues will become increasingly complex.

4. Conclusion

It has long been a social consensus that science and technology are the driving force for social development. As the core technology of the fourth industrial revolution, the influence of artificial intelligence on society is gradually emerging. Facing the future world of technology convergence, the integration of literature and intelligent technology in the field of network literature will also become an irresistible trend, which requires us to face with an open and positive attitude. The emergence of new technologies not only challenges people's traditional literary concepts and production, but also brings contemporary people into a deeper thinking dimension. What is the essence of writing? Is it an aesthetic word after arrangement and combination? Or is it the view of society, life and nature that comes from the deep soul behind the words? Can works produced by intelligent programs bring literary aesthetics? How to determine plagiarism in intelligent writing system? How to prevent human systemic stupidity? A series of questions will become a hot topic for experts and scholars from all walks of life in the future. All of these require colleagues in the literary circle and relevant cultural

supervision departments of the country to lead, coordinate, supervise and encourage the work from a strategic position, so as to accurately feel the pulse of literature consumption taste under the network conditions and flourish the network literature market with Chinese characteristics. The development and application of AI technology brings more possibilities for the development of the network literature and makes it present new characteristics. At the same time, it also faces multiple dilemmas such as technology, law, ethics, and aesthetics and so on. It puts forward a new research topic for contemporary people. All these require colleagues in the literary circles and relevant national cultural supervision departments to lead, coordinate, supervise and encourage the work from a strategic position, so as to accurately feel the pulse of literature consumption taste and flourish the network literature market with Chinese characteristics.

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