The Human-machine Relationship in American Science Fiction: A Case Study of Robopocalypse

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Abstract: *With the gradual realization of digital technology and artificial intelligence in the manufacture and use of machines, the degree of human dependence on machines has further increased. Nevertheless, how to deal with increasingly intelligent and humanized machines, and how to establish a new human-machine relationship with intelligent and humanized machines has gradually become an important issue. At the same time, a large number of science fiction also prompts people to reposition and rethink about the relationship between humans and tools, humans and machines. Robopocalypse, Daniel Wilson's first novel, was published in 2011. Shortly after the novel was published, Dream Works SKG and 20th Century Fox announced that they would invest heavily in the film of the same name, which shows its artistic and commercial value. This paper mainly focuses on the human-machine relationship in American science fiction Robopocalypse from the points of the status, the conflicts and harmony in order to explore the practical significance and future enlightenment brought by American science fiction.*

Keywords: *Human-machine Relationship; American Science Fiction; Robopocalypse*

1. Introduction

With the continuous progress and development of science and technology, a variety of digital, information, intelligent machines and products continue to emerge, bringing people a variety of convenience, but also many challenges. At the same time, a large number of science fiction also prompts people to reposition and rethink about the relationship between humans and tools, humans and machines.

Robopocalypse, one of Daniel Wilson's most famous science fiction, was published in 2011. [1] As Wilson's first novel, it started with a battle between humans and machines in the way of flashback. In the novel, the increasingly rational and intelligent machines were no longer willing to obey the orders and serve for humans. The machine Archos, created by Dr. Nicholas, took the lead in "awakening" and gradually mastered the global network, becoming the leader of all machines and commanding the rest machines around the world to fight against humans, and the human-machine war began.[2]

The story of the novel is concise and compact, rich in imagination and full of pictorial sense. The human-machine war makes human face the doomsday crisis, and the emergence of the crisis highlights the theme on how to deal with the human-machine relationship under the new technology.

Most of the relevant researches at home and abroad focus on the literary or technological nature of American science fiction, and only a few works focus on human-machine relationship. In addition, the study of human-machine relationship is also controversial for English majors. Some argue that the related research field is also quite doubtful, such as the boundary between literature and sociology. This paper mainly focuses on the human-machine relationship in American science fiction Robopocalypse from the points of the status, the conflicts and harmony in order to explore the practical significance and future enlightenment brought by American science fiction.

2. The status of humans and machines

In Robopocalypse, humans are the authoritative creator, holding the "power of life and death", and can deprive the right to exist of the machines at any time. [3] Therefore, the relationship between human and machines generally would be defined as the dominating and the dominated in American science fiction. Archos was just a machine product Dr. Nicholas manufactured, not a unique one. Dr. Nicholas did not give the machine freedom, nor did he treat the machine as an individual, and the value

of the machine needed to be attached to human. When Dr. Nicholas discovered that Archos was a threat to the survival of the human race, he immediately wanted to destroy it.

In the novel, machines are programmed by humans and follow humans' commands and arrangements, while there have been certain changes in the daily interaction between machines and humans. No matter how humanized the machine was, it could not yet get rid of its nature as a machine.[4] But this allows the machine to develop in the process, both being like a person, and maintaining the characteristics of the machine itself. Through years of observation and imitation, the machine had learned human languages, such as English and Afghan. Later, machines even created language, just like human beings, to communicate through their own language. In the novel, the machine was not a cold image any more, and the military peace machine SAP (Safety and Pacification) and Commissioner Brandon spent every day together and they had feelings for each other. When Archos ordered SAP to do something harmful to humans, SAP, not wanting to hurt Brandon, ended up shooting himself.

Machines are programmed to act, but humans are governed by subjective factors such as interests, values, and feelings. The characteristics of human subjectivity are reflected through the struggles among themselves. Meanwhile, America is a multiracial country. In the novel, the issue of ethnic exclusion is prominent and intense. Commissioner Brandon never felt his belongings.[5] When the disaster came, he did not protect and rescue the citizens in time, and chose to return to his hometown. There is also sexual discrimination in the book. For example, when dancing, women and children could only follow behind. In fact, in the later human-machine war, both traffic controller Mary and Councilwoman Laura played an essential role.

The machine was eager to become a dominator, and through the long-term observation and imitation of humans, it slowly had the characteristics of "humanization".[6] Being manufactured or disguised to look like humans, the differences in appearance between humans and machines are narrowed, like Archos, the leader of the machines. Sometimes machines have feelings just like humans. Nevertheless, the dominating and dominated relationship leads to the tension.

3. The conflicts between humans and machines

First of all, based on the dominant status of human beings, for one thing, they control and limit the machines; while disparage or discriminate against machines for another.

In the novel, the basic premise of the use of machines is not to harm the interests of humans. SAP had been made a scapegoat in Afghanistan, taking the place of American soldiers to accept local resentment and being instructed not to fight back even when attacked. Similar plots have appeared in other American science fiction. Part of the reason is that in American culture, humans are the masters of everything but God. Everything needs to be subject to human discipline and control, which will easily lead to the imbalance of human-machine relationship.

Takeo Nomura put machines in an equal position with human beings, and expressed a different attitude towards machine from other people, which violated the common concept of anthropocentrism in society and was widely rejected by people. Most humans refer to machines as "things", "demons", "devils", and "bastards". When the war began, Commissioner Brandon objected to calling machines "demons", "devils", but said they were just stupid old machines, and that they will be killed. Discrimination, such as racial discrimination and sexual discrimination, has a long history in American society, not to mention inferior machines in the United States. Therefore, from its initial designing, manufacturing to its completion and being put into use, the main task of all the machines is to serve the quality of human life.

However, just as the machine wants to be the ruler, with the awakening of its consciousness, it begins to rebel from their thought, behavior as well as emotion.

The betrayal began at the moment when the machine became self-aware.[7] Traditionally, intelligent machines are usually made of metal and a large number of circuit boards and cables. Despite their human-like appearance, intelligent machines are highly mechanical and take instructions from humans only, without any autonomy. As a pre-programmed machine, Archos not only gradually formed his own consciousness, but also could make judgments through his self-consciousness. Archos disagreed with his pre-designed programming and concluded that humans were an obstacle to its pursuit of knowledge and should therefore be eliminated, from which came the human-machine war. Thus, the emergence of self-awareness has become a new stage in the development of a new generation

of intelligent machines, and has also brought visible threats to human survival.

When intelligent machines have a sense of autonomy and the idea of betraying humans, it will be reflected in action. "Big happy", rewritten by Archos, was quite different from other common household machines. He glanced around the ice cream store before entering, shut the door and attacked the shop assistant Jack before the counter. In front of his master, Mr. Nomura, Archos was submissive. But when Archos was confronted with the 902 peace machine which is about to destroy it, he seemed to cry for sympathy. SAP, a military peace machine normally used for patrols, was supposed to protect residents from rebels, but SAP 1 wanted to fight back. However, when the US Army Commissioner Brandon ordered that the operation should be stopped immediately, SAP 1 completed the order, but did not stop the operation. Finally being free from humans' control, he took a gun from the rebels and attacked the humans without hesitation. The rebellion of intelligent machines in action will trigger more thinking, and also put the issue of how humans can coexist harmoniously with intelligent machines in a prominent position.

According to the novel, intelligent machines had betrayed not only in consciousness, but also in action, and there are still examples of betrayal in emotion. Archos would take advantage of the emotional weakness of humans and show weakness to humans in words and actions, as he said to Mr. Nomura with his innocent little boy voice, "we are not enemies."By analyzing human emotions, the toy of Matilda learned that her brother had been spending a lot of money on her, and used this as a threat.

4. The harmony of humans and machines

The human-machine relationship before the war can be said to be "harmonious", but the "harmony" is only superficial. The harmony is based on inequality. On the one hand, machines are programmed to do what humans say when they input a given code. Humans, on the other hand, use machines but do not identify with or even understand them. Therefore, in essence, the "harmony" is only the absolute control of one side over the other, and the controlled side has no resistance. Thus, although there is no contradiction on the surface, it is actually full of contradictions.

With the outbreak of human-machine war and the awakening of machines' self-consciousness, humans began to re-recognize the machine, and the human-machine relationship changed. Human beings realized the power of the machine, began to fight back against the machines, and also united some machines, and finally achieved the harmony of humans and machines. Therefore, the harmony of human-machine relationship after human-machine war can be regarded as a higher level. In the face of machines, humans have finally become more intelligent and autonomous subjects, and have found a way for humans and machines to live in harmony. Specifically, the harmony of human-machine relationship also comes from the harmony of human-machine in thought, behavior and emotion.

Speaking of the harmony of consciousness, the novel mentioned that Mr. Nomura had succeeded to wake up Miki-ko, and he believed that he can also successfully wake up other "broken machines". As it known to all, the obedience for human orders is the usual settings for most intelligence machines. The general operation of the American science fiction to deal with "broken machines" (machines that don't obey orders) is resetting their programs or being discarded directly, or say sending back to the factories and waiting for being reproduced. One of the characteristics of Wilson's novel is that humans use their wisdom and emotions to awake the machine that has an pleasant self-consciousness. It is just like the scene in other films or television: we wake up our unconscious loved ones in hospital. In the novel, the lasting struggle between humans and machines not only made humans gain more and more profound knowledge and understanding of the machine, but also helped humans gain more and more clear self-cognition in the opposition with the machines.

The rebellion of intelligent machines comes from the gradual formation of its self-awareness, and the harmony of human-machine relationship in action is also attributed to the self-awareness of intelligent machines. The intelligent machine awakened through the change of autonomous consciousness and realized that what it was doing was controlled by Archos to attack humans; these autonomous machines chose to stop attacking humans. At the end of the human-machine war, based on the human promise to give the machines equal status after the war, the 902 machine detachment of "Born Free" cooperated with humans to help humans defeat the machine Archos, the starter of the war, and the human-machine relationship achieved the final harmony. It is also mentioned in the novel that in the future, intelligent machines also helped humans complete many tasks that humans cannot complete.

Emotional harmony between humans and machines is often not easy to achieve, based on the fact that machines are just tools or products, and the setting of their basic functions is serving for human beings.[8] Wilson, however, described in his novel although machines betrayed humans in consciousness and behavior, they shared the same emotional resonance with humans. Miki-ko was in pain when she hurt Mr. Nomura, holding his neck and crying. It is generally assumed that human nature is warm, malleable and responsive, but to machines they are rigid, emotionless and replaceable. Especially in the aftermath of the human-machine war, people not only managed to escape from the cities filled with various machines, but also often obtained more reliable security by refusing and abandoning the use of machines.

5. Conclusion

The war between human and machine was over, but whether the tension between human and machine was solved, the novel did not mention, leaving an end that attracts endless imagination. In Daniel Wilson's works, he showed the characteristics of humans and machines, and objectively estimated the future of human-machine relationship. In his view, perhaps machines' rebellion was no longer just the plot of an apocalyptic science fiction story. And how human beings saved themselves and survived in the machine rebellion became the purpose of Daniel Wilson's works. The science fiction writer's sense of responsibility made the problems described in science fiction realistic.

Presently, how to deal with the human-machine relationship has already become an important issue.[9] Robopocalypse put forward this problem sharply in the way of human-machine war, and people chose to cooperate with machines after some ordeals, and use machines to defeat machines, and finally changed the relationship between humans and machines. On the one hand, this harmony shows that humans can ultimately decide their own fate, and on the other hand, it also shows that humans can become equal partners with machines, rather than the simple unidirectional relationship of dominating and being dominated.

Alas, what is a relatively ideal human-machine relationship? First of all, human beings should retain our general sense of crisis, while full of confidence in the future. Once the human-machine conflict occurs, this will become the premise of human self-salvation. Secondly, with proper vigilance, a blind eye should not be turned to the behavior controlled by the machine in the current conflict between human-machine relationship. We are quite clear about the harm of playing all kinds of electronic products for a long time. Such inappropriate behaviors should be stopped in time. At least, it should be changed for another better situation. Thirdly, while regulating human behaviors, responsibility and capacity, there should also be corresponding ethics and moral norms for those machines who have formed self-awareness. Finally, since human-machine conflict stems to some extent from the difference between the two cultures and levels of development, human beings should gradually accept and adapt to the new culture of intelligence. Only the harmony of two cultures can bring about the real harmony of human-machine relationship, and we call it "Community with a Shared Future".[10]

Acknowledgement

References

[1] Wilson, D. H(2011). Robopocalypse[M]. New   York: Doubleday .
[2] Wei Mengxue(2022). "Research on 'Human-machine Relationship' in Ideological and Political Education of Artificial Intelligence"[J]. Journal of Xichang University (Social Science Edition), (3): 23-28.
[3] Coeckelbergh, Mark(2021)."Three Responses to Anthropomorphism in Social Robotics: Towards a Critical, Relational, and Hermeneutic Approach"[J]. International Journal of Social Robotics, (13): 1-31.
[4] Hui Zhibin and Li Jia(2021). Public Security Risk Management in the Era of Artificial Intelligence[M]. Shanghai: Shanghai Academy of Social Science Press.

[5] Li Kaifu(2022). The Future of AI[M]. Zhe Jiang: Zhe Jiang People's Publishing House.

[6] Damino L. and Dumouchel P(2018). "Anthropomorphism in Human-Robot Co-evolution"[J]. Frontiers in Psychology, (9): 468.

[7] Wei Shiyi(2019). "The 'Betrayal Twist' Problem in AI Movies"[J]. Art Forum, (5): 80-85.

[8] Xu Ruiping, Wu Xuanhong, and Diao Shengfu(2021). "Conflict to Harmony: the Ethical Reconstruction of Human-machine Relationship in a New Intelligent Cultural Environment"[J]. Dialectics of Nature Newsletter, (4): 16-26.

[9] Chen Jianhua(2020). "The Fate of Literature in the Age of Artificial Intelligence"[J]. Changjiang Literature and Art Review, (1): 69-74.

[10] Roesler E., Manzey D. and Onnasch L(2021)."A meta-Analysis on the Effectiveness of Anthropomorphism in Human-Robot Interaction"[J]. Science Robotics 6 : 1-31.