

Post-Ethnic Humanistic Care in Chinese American Science Fictions

XU Gang^{[a],*}

^[a] Inner Mongolian University for Nationalities, Tongliao, China. *Corresponding author.

Supported by the Science and Technology Research Project of institutions of higher learning in Inner Mongolia Autonomous Region: A study of futurism in Chinese American science fiction" (NJSY21434).

Received 8 April 2021; accepted 2 June 2021 Published online 26 June 2021

Abstract

In recent years, Chinese American science fiction shows the integration of science, literature and humanistic care into an organic whole. Chinese American science fiction writers combine the elements of science and technology with the realistic social problems in their works to expose the dilemmas between the development of science and technology and human society, thus the issues of artificial intelligence ethics, technological alienation and the rights and interests of the marginal group have gradually become the central concern in Chinese American science fictions. In essence, the focus of Chinese American science fiction writers transcends ethnic barriers and shows a kind of post-ethnic universal humanistic care, which has a positive and practical significance for building a new world order of harmony and fraternity.

Key words: Chinese American; Science fiction; Postethnic humanistic care

X u, G. (2021). Post-Ethnic Humanistic Care in Chinese American Science Fictions. *Cross-Cultural Communication*, *17*(2), 28-35. Available from: http://www.cscanada.net/index.php/ccc/article/view/12188 DOI: http://dx.doi.org/10.3968/12188

INTRODUCTION

In recent years, Chinese American science fiction has risen rapidly. Ted Jiang, Ken Liu and other Chinese science fiction writers have successively won the Hugo

Award, Nebula Award and other science fiction awards, and the new generation of Chinese science fiction writers, such as Karen Bao and Shelley Li, have also been repeatedly nominated for Hugo Award, Nebula Award and Campbell Award. In the traditional sense, the themes of Chinese American writers' works are relatively limited, such as identity anxiety, homesickness, and generational differences among immigrants. However, some of the second and third generations of Chinese immigrants are not necessarily interested in these topics, and they are devoting their literary passion to genre literature such as science fiction, because genre literature does not have stereotypes about the ethnic origin of the authors, and the motif of science fiction transcends national boundaries and ethnic groups, so science fiction makes Chinese American writers break through the fetters of realistic literary creation. Some Chinese science fiction writers use the futurism perspective of science fiction to link the past, present and future organically so that they can better express their reflection on reality and insight into the future development of the world. This paper will analyze the works of three Chinese science fiction writers, Ted Jiang, Ken Liu, Karen Bao and Shelley Li, and explore their reflection on the universal humanistic care beyond ethnic barriers.

1. THE MEDITATION ON ARTIFICIAL INTELLIGENCE ETHINICS

Artificial intelligence is closely related to digital technologies that will have significant impact on the development of humanity in the near future. They have raised fundamental questions about what we should do with these systems, what risks they involve, and how we can treat the Artificial Intelligence with proper life ethics. In the science fiction of Chinese American writers, the life ethics related to Artificial Intelligence Ethics is explored in depth.

1.1 The Development of Life Ethics Into the Field of Artificial Intelligence

At the very beginning, life ethics was regarded as an interdisciplinary discipline to solve specific life problems and strengthen the research of strategies and methods in life medicine science. The definition of life in life ethics is mainly refers to human life, but it also involved in animal and plant life and ecological environment, and the ethics is normative research to human behavior science, a combination of both means that defines the subject as applies the theory and method of the ethics of life science and health care policies, laws and systems research on the ethical issues such as the decisions and behavior. In fact, life ethics points to the most fundamental goal of clarifying and resolving the human condition, the value of life and the purpose of life.

Life ethics clearly points to the specific ethical problems related to the survival of all mankind in the real society, and sorts out and improves these problems. What's more, bioethics advocates respect for different cultural values, and highlights the bioethical problems common to all mankind today, seeking to solve these problems under the principle of seeking common ground while setting aside minor differences on the basis of mutual consultation, thus it explores the philosophical issues such as the nature of morality, the value of life and the essential attributes of human beings, and to explore the problems of human existence from various cultural levels.

In the contemporary world, science and technology become links with human society more closely. The industrial revolution creates miracles one by one, rapidly changing the social life of human beings. As we know, during the last industrial revolution the machines took the place of human being's body, and in the new industrial revolution represented by computer and artificial intelligence, the aim of machines becomes human being's brain. Generally speaking, the final aim of artificial intelligence is to make machine think like we human beings. And in the field of science fiction, Isaac Asimov introduced The Three Laws of Robotics ("A robot may not injure a human being or, through inaction, allow a human being to come to harm. A robot must obey the orders given it by human beings, except where such orders would conflict with the First Law. A robot must protect its own existence as long as such protection does not conflict with the First or Second Law") in his 1942 short story "Runaround" (Asimov, 1950, p.68), In a great number of science fictions since then always depicted a wonderful future world in which the science and technology are prosperous, the material is extremely abundant and the life of human being is more beautiful because of artificial intelligence. Human beings get well along with artificial intelligence on condition that artificial intelligence must totally submit to human beings, respect their human owner, and do all heavy physical labor, work that human beings are not able to or unwilling to do. However, when artificial intelligence, particularly "conscious" artificial intelligence, brings some convenience and benefits to mankind, it also causes some ethical issues such as human rights ethics, responsibility ethics and so on. These problems are not only related to science and technology itself, but more involved in the ethical reflection on the problems of human society.

So artificial intelligence ethics is concerned with ensuring that "the behavior of machines toward human users and perhaps other machines as well, is ethically acceptable". (Anderson and Anderson 2007, p.15) If one takes artificial intelligence ethics to concern moral agents, in some substantial sense, then these agents can be called "artificial moral agents", having rights and responsibilities. However, the discussion about artificial entities challenges a number of common notions in ethics and it can be very useful to understand these in abstraction from the human case (Misselhorn, 2020, p.79).

1.2 The Ethical Dilemmas of Artificial Intelligence.

In his science fiction The Lifecycle of Software Objects published in 2010, Ted Chiang focuses on the ethical dilemmas brought about by artificial intelligence. In this novella, Ted Chiang describes a kind of artificial intelligence named digients, which was invented and became popular among people's life, but finally became out of fashion. Different from most existing science fictions on artificial intelligence in which the artificial intelligences are designed perfectly from the moment they are invented and are able to do whatever human beings want them to do, this novella imagines the artificial intelligence possessed the ability to learn and think. In Ted Chiang's opinion, it is impossible for artificial intelligence to be born with everything human beings want it to have or with the ability to think by itself. He believes that they must be taught by somebody else. In The Lifecycle of Software Objects, the protagonists Ana Alvareda, Derek Brooks and other people take the responsibility to teach the artificial intelligence. The experience of living with the artificial intelligence brings them happiness and difficulties as well.

The story begins with Ana's attempt to be a trainer of digients, virtual pets whose codes were run on the network and who lived in virtual environment, being born without much knowledge about the world but with the ability to learn. Their developer sold them to consumers as pets and let consumers raise and teach them. As digients gradually grew up, they had some human characteristics little by little and different people treated them considerably differently. Most people treated them just like slaves: some abused them while others entertained themselves with digients even the digients had become sentients at last. A person named Bryce Talbot trained his digient Andro to act as his personal assistant and sold his copies to a company. Another company Exponential Appliances made household robots and it "regularly releases new versions, advertising each one as being a step closer to the consumer's dream of artificial intelligence: a butler that is utterly loyal and attentive from the moment it's switched on" (Chiang, 2010, p.37). It is clear that what these two companies tried to provide were slaves for human beings. They wanted their digients to be conscious and utterly loyal without any right and without their owners' guilt. Therefore, in one interview, Ted Chiang said that the artificial intelligence is in fact "a metaphor for slavery". (Huang, 2013, p.12)

In our real world, although the existing software and robots don't look like humans yet, it's the constant effort of human to create artificial intelligence which is similar to humans physically. So what is behind this desire of human to create such kind of artificial intelligence? In Ted Chiang's opinion, the reason to create artificial intelligence bearing human resemblance in science fiction is just to fulfill some men's desire to possess a loyal slave, as the most appealing thing of robots described in science fiction is that they would be slaves and their owner could feel no guilty. The robots are basically slaves because they have no choices or real autonomy. The effort to portray human-like artificial intelligence in science fiction shows that it may be possible to have slaves without guilt. This assumption, in Ted Chiang's opinion, is impossible to become true because if an artificial intelligence is both conscious and as capable as a human being, "you would be just as ethically culpable as if you had enslaved a human being." (Huang, 2013, p.14). Ted Chiang thinks that one could not have a conscious being serving him or her without ethical obligations since he believes a conscious and competent being could "only come about through twenty years of training, being raised by others and gaining experience over its lifetime" (Huang, 2013, p.15), just like what Ana and her colleague, the animator Derek did in The Lifecycle of Software Objects; and if you have a conscious being which was raised over a twentyyear period, then you will feel an ethical obligation and emotional commitment to it. Here in the story, a handful of people, such as Ana and Derek, not only raised the digients but also committed themselves to the digients. After the company which developed those digients closed down, those people still didn't give up on their digients since they had bonded with their digients emotionally in a way that most customers did not. Therefore, while the majority of people shut off their digients with no sense of guilt, those people were unwilling to turn off their digient although this had put them in a difficult position. In some way, they are representatives of the advanced people who have emotional reaction against the injustice. At the ending of the story, there is a description of Ana's internal world: She imagines Jax maturing over the years, both in Real Space and in the real world. She also imagines him as a participant in the digient subculture, a

community with enough money and skills to port itself to new platforms when the need arises. In Ana's imagination, Jax is well accepted by a generation of human beings who have grown up with digients and view them as partners in a way that members of her generation will never be able to.

Ana's imagination, in essence, represents a new type of life ethics, that is, artificial intelligence ethics. She firmly believed that the digients should be equal with human beings and have real autonomy, instead of being enslaved, serving to or entertaining human beings with no options. What Ana imagined might be the right future digients would have, but it would have a long way to go, just like the abolishment of slavery or women's acquiring the right to vote. The changes mentioned above are the result of a popular emotional reaction against unjust laws. Before slavery could be abolished, a great deal of people had to feel that it was wrong to enslave people. Before women could get their right to vote, numerous people had to feel that the deprivation of women's vote right was not right. To give the rights back to the disenfranchised, there has to be an increasing popular sentiment to advocate it. Analogously, artificial intelligence would not gain their suppositional rights until enough human beings have taken the time to raise them and learn that it is not right for human beings to enslave them and they should have their rights since they are human-like.

Although nowadays no sensible person would think that we should regard any robot as a person or give any robot rights, one day the robot may be a right holder. Rodney Brooks, director of the Artificial Intelligence Lab at M.I.T., said in his article "Will Robots Rise Up and Demand Their Right" that robots will become more human-like in the future and it "will eventually lead to robots to which we will want to extend the same inalienable rights that humans enjoy"(Rodney Brooks, 2000, P.23). These years there are an increasing number of calls for robot rights. Peter Asaro thinks identifying robots rights as one of the issues robot ethics should be studied about. He asks "How should robots treat people, and how should people treat robots? Should robots have rights?" (Asaro, 2006, p.10). He also believes that "at some point in the future, robots might simply demand their rights". In a conference paper David Levy has argued that artificially conscious robots should have rights. (Levy, 2009, p.211) And Steve Torrance, after noticing that the UN Universal Declaration of Human Rights does not support the rights of artificial agents or humanoids, asks whether there are "any circumstances under which it might be morally appropriate for us to consider extending such rights specifically to humanoids that are taken to be devoid of phenomenal consciousness".(Steve Torrance. 2008, p.501.) In Ted Chiang's Lifecycle of Software Objects, the protagonists made their own choice to treat the artificial intelligence with respect and struggle for their rights in a society where most people treated artificial intelligence as slaves. Actually the issue whether artificial intelligence agents should be treated with respect as human beings is a test of we human beings' conscience, for those who treat artificial intelligence as slaves are very likely to have a vicious "Pandora's box" in their mind, that is ,they will have a tendency to control or exploit other people in a way they treat artificial intelligence. So Ted Chiang's *Lifecycle of Software Objects* show a new kind of life ethics that rejects anthropocentrism, advocating the harmonious development of human beings and science and technology. And this kind of life ethics will also be applied to the marginalized group in our human society.

2..THE METAPHORICAL CRITICISM OF TECHNOLOGICAL ALIENATION

Reflection on the origin of the alienation of science and technology can be dated back to over 100 years ago, when Marx realized that the alienation of science and technology ruled human beings. "In our day and age", he points out, "everything seems to contain its own reverse. We have seen the wonderful power of machines to reduce human labour and to make it more productive, yet to induce hunger and excessive fatigue. The newfound source of wealth has, by some strange and inscrutable magic, become the root of poverty. The triumph of technology, it seems, has come at the cost of moral decay. As man becomes more and more in control of his own nature, he becomes more and more the slave of others or of his own vile deeds. Even the pure light of science seemed to shine only against the dark background of ignorance. All our discoveries and advances seem to have the result of giving intellectual life to material forces, and transforming human life into dull material forces. This confrontation between modern industry, science, and modern poverty and decay, between the forces of production and the relations of production of our time, is an obvious, inevitable and indisputable fact." (Karl Marx, Friedrich Engels, 1982, p. 45) However, Marx did not attribute the alienation of science and technology to science and technology itself, but to a kind of social connection and the relationship between people. This gives us some illumination that the criticism of the alienation of science and technology should not stay in the criticism of science and technology itself, but should criticize man's concept of science and technology. Therefore, we must restore the subject position of man in production, re-establish the correct relationship between man and science and technology, so that man can truly become the master of technology. And this motif is mainly reflected in science fictions through the metaphorical criticism of technological alienation.

2.1 People's Craze for the Power of Science and Technology

Faced with the instrumental rationality brought by modernity, Shelley Li, a writer born in the 1990s, also put forward her own opinions in her science fiction Intelligent Truth. Intelligent Truth tells the story of robots that has become highly intelligent, and robot diagnostics doctor Katie Huang has been exploring whether robots have human emotions and consciousness. Katy tested the emotional structure of the robot with Tianmu Mountain Ascended in a Dream, a poem written by Li Bai, a Chinese poet during the Tan Dynasty. However, the more advanced the robot is, the more accustomed it is to turn on the built-in search engine and combine online resources with dictionary explanations to produce the "most accurate" answers. By chance, she came into contact with her mother's assistant robot Carter, a 40-year-old "Crystal Blue" model. In the process of contact, Katy found that Carter could not only make independent and nonprocedural aesthetic judgment on the poems of Whitman and Li Bai, but also learn to observe human emotions and understand human ethical order. In the novel, high intelligence, complete functions, precise calculation and rigorous program not only give birth to a huge robot industry, but also in a sense, read out human's dominance and superiority in the realm of consciousness. However, no matter how intelligent the robot is, it is only human code input and precise delivery, not the meaning of the robot itself. It reveals such a dilemma of modernity: in a society highly dependent on and infinitely magnifying artificial intelligence, "artificial" has become the basis for judging the degree of happiness, while "intelligence" itself is wandering in the refresh of technical ethics, eliminating the position of human. In Technology and Civilization, Lewis Mumford said: "If our own souls are empty, the system of machines can only make us emptier. If we are passive and powerless to begin with, the system of machines will make us weaker." (Mumford, p.2) Based on this standpoint, Li Yuan considers Li Bai's poems as the testing standard and value code to screen and interpret whether a conscious body has "soul". The meaning of poetry needs to be interpreted by real life experiences, not homogenous conclusions or "rational results" produced by data integration and algorithmic generation. Similarly, full aesthetic enthusiasm, unique individual experience and real emotional response cannot be completed by the precise simulation under instrumental rationality. As human nature is dissimilated by technology, our culture and art are increasingly trending towards secularism according to global rationalism. Actually, the root of technological alienation lies in the human activity itself. Against such a social phenomenon, Intelligent Truth questions the worship of technology with a zest like a deist.

In science fiction Understanding, Ted Jiang also shows his concern about people's obsession with science and technology. The novella describes the birth of superhuman caused by a treatment named the Hormone K Therapy. The treatment helped to improve human's intelligence level, and even brought about physical changes. All organs and even every cell have become machines driven at will, and thinking can be programmed and operated, leading to the alienation of personality. He is more concerned with the improvement of his personal abilities, and his direction of growth is to look at the way in which the body is about to constrain his ability to grow. The villain of the book is another patient who gets the Hormone K Therapy and has reached the state of super intelligence before the protagonist. Unlike the protagonist who only wants to pursue personal advancement and cares nothing about the outside world, the villain is an ambitious guy who plans to rule the world, or in his own words, "to save the world". Any substantial progress in the protagonist's braincomputer interface is bound to cause huge repercussions in human society and threaten the villain's plans. The Hormone K Therapy has created two supermen for our world. One of them is intent on remaking the world, while the other is intent on using his superhuman intelligence to find the ultimate truth about the universe. As the only two supermen, since they cannot cooperate, the inevitable outbreak of conflict, they must make a break. After a battle, the protagonist finally loses to the more "socially experienced" villain. With the improvement of cognition of human being with the help of advanced science and technology, the protagonist longs for the new world which is pure and harmonious, but in the end, he understands science and technology is not the sole factor to change the word for the better, for the advanced science and technology may also be used by evil forces. All in all, the novella shows the negative effect of pursuing the power of science and technology at the cost of morality.

2.2 The Metaphor of Opposing Technological Alienation

In some sense, science fiction may be a warning, that is, they predict the future based on the assumption that some dangerous trends in contemporary society will continue indefinitely. Therefore, science fictions often express social anxiety about the rate and direction of technological change, doubt about the ability of mankind to predict the consequences of this change, and skepticism about the motives of those who push for technological advancement. And this motif is often presented through the metaphorical opposition to technological alienation in science fictions.

In *Dove Arising*, A post-90s Chinese female writer Karen Bao creates a high-tech, but bloodier and more primitive society, which is just a metaphor of showing her opposition against technological alienation in reality. In *Dove Arising*, in contrast to the high-tech civilization of the lunar age, which the author presents to us, there is the constant ugliness of politicians, and the growing antagonism. The moon is not the pure land of imagination, though the people on the moon bases are capable of creating the greenhouse's "carbon dioxide to oxygen filtration system" and "the artificial gravity based on diamagnetic repulsion theory", there are also the dreaded "militia" overseeing the six bases on the moon. The squalor and chaos of the asylum was like a microcosm of the entire lunar civilization. People and things were simply divided into "useful" and "useless", and those who were strong, armed, and capable of scientific research were automatically promoted to the ruling class, while others were then discarded like the most useless germs in the body. The opening scene, in which people sit around smoking, is ridiculed by onlookers as "false gratification" and "stupid pleasure". Actually it is a reminder of the social reality in which there are a mass of unawakened people.

According to scientists, the moon is about one-fiftieth the size of the earth. At that moment, people seemed to be fleeing resolutely to establish a new country on the moon for the purpose of freedom and not being dragged into the war of resource plunder. However, inevitably, the reintegration of human civilization brought a series of unpredictable disasters -- classes were redivided, and groups with weapons and resources became leaders; Outside, there are the evil intentions of Earth people, and within, new areas are being opened up, and the leaders are gradually shaping up as totalitarian rulers and deepening their terror with the beautiful name of "guarding the homeland". The lack of personnel and resources forced people to give up their dreams and spare time life, shut down all projects unrelated to development, magnified obligations and reduced rights; The unconscionable tilt of resources further triggers the desire for empowerment and imposes the process of individual deprivation on the lower classes. White Dove, the protagonist of the novel, also realized this point after a family tragedy. The unexpected death of her father, the mother who was put into prison for no reason, as well as the dirty asylum, the vicious moon army, all these let her realize the turbulent life under the calm surface of the life on the moon base. Hence, White Dove quickly transformed from a carefree little girl into a mature adult, although she is only 15 years old.

In the two works above, we can see a large number of fantasy, exaggeration, deformation, absurdity, black humor and other techniques, so that the text can convey obtained the deep connotation beyond the literal meaning. In effect, many details about the life of lunar men in *Dove Arising* and the vicious behaviors in *Understand*, can be found in our real life. Through fictitious fantasy, the authors presents people's craze for the power of science and technology and in this way, reveals and criticizes the drawbacks of technological alienation.

3..THE SCIENCE-FICTIONALIZED CONCER ABOUT THE MARGINAL GROUP

In many science fictions, human beings (or other species) are always presented as the center of the interplanetary species or species on our planet. The vicious competition that spawned Star Wars is often seen as a manifestation of a lack of ethnic awareness and a lack of real consideration of social reality. However, in many Chinese American science fiction writers' works, Utopian harmony of mankind regardless of racial or species difference is the usual motif. The writing form of science fiction offers a perspective of cognitive estrangement for Chinese American science fiction writers to cover the themes of history and ethnicity. Besides, it also helps to deal with some sensitive topics with defamiliarization narrative, and to inspire cognitive thinking with detached vision, getting rid of the direct influence of ideology, cultural differences and practical attitudes, to enter into realistic discussions in the way of future archaeology.

3.1 The Bitterness of History and the Difficulties of Reality of the Marginal

In the works of Chinese American science fiction writer Ken Liu, his ethnic consciousness unfolds itself in the "container" of science fiction and becomes a powerful support for the literary imagination. As Ken Liu said in an interview after he won the Nebula and Hugo Awards, "I think.....The intrinsic commonality between ethnic literature and science fiction is that the term 'alien' is a form of civilization different from theirs (the West).In a deeper sense, the reason why science fiction has a place in the UK and the US is that westerners have to deal with the problem of multicultural, multi-ethnic contact. They have always had to think about how to deal with aliens. The alien civilization narrative in science fiction can be regarded as the literary reflection of this social mentality." (Liu, 2012)

Today, after centuries of struggle and integration, Western societies are much more tolerant of minorities. From the "Melting Pot" to the "Salad Plate", the change of language expression reflects the change of people's way of thinking. Multicultural civilization has become a major feature of American society. Yet behind the scenes, on every level of politics, economy and culture, the alien threat is still present.

Under the package of science fiction, what Ken Liu touches is the reality of human beings, the link between the past and the present, the present and the future, and the view of human history that stands on the ethnic standpoint but transcends the development consciousness of a single ethnic group. Ken Liu is not just a Chinese, nor is he just an American. Being Chinese-American may mean contradiction, dispute, distress, and the trapped situation in the gap, but this unique standpoint helps him get rid of the narrow concept of nationalism and acquire the ability to view reality from the perspective of defamiliarization. So in his science fiction such as The Five Flavours and The Paper Menagerie, Ken Liu attempts to change the original discourse frame in the limited social structure and to fight for another opportunity for Chinese Americans to have a voice on the ethnic map. The purpose of his science-fictionalized ethnic concern is not to promote Chinese culture, but to inlay their own strong and masculine cultural identity on the complex cultural landscape of the United States. For contemporary Chinese American writers, this cultural tradition does not simply bind Chinese civilization and American culture. What is more important is that it takes advantage of the writers' dual identities to extend their vision from the narrow cultural landscape where the two civilizations intersect. More concerned but also more objective view of the strengths and weaknesses of Chinese and Western culture, as a middleman, the identity of the observer to maintain introspection and independence. So Ken Liu is not afraid to write the bitterness of history and the difficulties of reality of those marginal groups in American society through the platform of his science fiction.

Science fiction helps Ken Liu to complete the historical and realistic thinking in the narrative in the way of ideological reality. In terms of the specific principle of ethnic questions, science fiction helps people to carry out the logical deduction of the existence and development of multiple civilizations in the story Although this kind of literary creation is not the same as the rigorous, philosophical theoretical system of speculative form, but it will have a more profound impression and a more farreaching impact on the public. Liu's science fiction will surely be able to enrich and perfect the construction of Chinese cultural tradition. The multidimensional space and time between the past and the present, the present and the future are drawn as belonging to the future, the ideal, the multi-civilization world.

3.2 The Technological Attempt to Eradicate "Lookism"

In the much globalized world, it's very essential to learn to deal with the discrepancies between different nations properly. From the perspective of global ethics, the literary works of many Chinese writers provide positive enlightenment for solving the problem of harmonious coexistence of different civilizations and cultural groups. Ted Chiang, as a Chinese American science fiction writer, shows a kind of science-fictionalized concern about the marginal groups in the mainstream society in his *Linking What You See: A Documentary*. In the novel, Ted Chiang mainly describes a kind of aesthetic interference mirror, namely calliagnosia¹¹by simulating human brain, which can interfere with or stop people to make the aesthetic responses on different faces. The novel uses the documentary style to present different opinions from various social groups about an ethical problem whether the society should put on calliagnosia or not.

First of all, the key problem to be solved in this novel is the preference for attractive appearance caused by the invention of calliagnosia which is a kind of technology which can interfere with or stop people to make the aesthetic responses on different faces. Different people hold different attitudes towards this interference. However, the reason why some people hold the negative attitude toward this new technology is basically because it damages the rights of social equality and justice. In the work Linking What You See: A Documentary, Chiang uses the word "lookism" to indicate the prejudice toward people because of their appearance. Lookism is like racism, sexism, ageism and the other -ism in that it can create what may be unjust barriers to the equal opportunities for the members in society. William R.Corbett, American professor of law, once said "Appearance matters in our society today more than it ever has before..." (William, 2007, p.157) Although no scientific evidence can prove the relationship between the appearance and abilities or other traits, people still give preferential treatment to attractive people and deny the opportunities to unattractive people.

Although the Infatuation about attractiveness is a common phenomenon, it damages equal and fair principles of ethics. In this novel, wearing calliagnosia just proves a fact that lookism exists in the society and thus it creates an unjust atmosphere. Chiang thinks that most people are against wearing calliagnosia, because people all like beautiful faces and things, which is the human nature. However, wearing the calliagnosia means preventing and interfering with people's accepting nerves, distorting and obscuring people's judgments on the beauty criteria so as to achieve the purpose of eliminating discrimination. Accepting calliagnosia means doubting their owners' judgment on the beauty, doubting themselves a fact that they cannot judge someone through other aspects. He holds a view that facial discrimination, sexual discrimination, racial discrimination and others exist in human life, and human just do not want to admit it. In an interview, Chiang said, "I sympathize with all the characters in the story that make an argument for calliagnosia. I feel the way they feel and identify with all

of them. And I do think that lookism discrimination based on attractiveness exists and is a legitimate issue, a locus of actual injustice in the same way that sexism and racism are. But no one ever talks about lookism that way. It is a form of prejudice that we're all happy with. We have a preference for attractive people over unattractive people and we are unashamed to admit it. People would be very reluctant to admit a preference for one race over another, but no one has any compunction about saying that they prefer attractive people to unattractive people. We can't help it, and we don't even want to help it. But I think it is an injustice. We all agree that racism and sexism are something we need to work against, but hardly anyone takes up lookism." (Huang, 2013)

It's no doubt that lookism is a wrong convention, but few people would like to stand up to fight against it. Chiang thinks that lookism is the result of human nature, but more is the result of social environment and education. This may be the reason why Ted is eager to use this virtual invention to change and eliminate this injustice and inequality of society. Ted Chiang writes this unequal and unjust social fact into the novel, making readers realize the existence of this phenomenon and reflect on their attitudes towards this often neglected social prejudice. On a deeper level, Ted Chiang also intends to inspire the readers to reflect on other forms of "lookism" such as racialism and sexism in the contemporary world, which are more destructive for the normal relationship between different ethnic groups and different nations.

CONCLUSION

In an era of increasingly powerful technology, the alienation of things and the materialization of man leads to the confrontation between instrumental rationality and value rationality. The value orientation to the instrumental reason makes human being depend excessively on the new technology; however, deviation of modern rationality and the expansion of instrument reason have led to the antagonism between men and nature, and between men and men. The Chinese American science fiction, as a newly emerging literary force in American literature, shows a unique humanistic concern on the issues of artificial intelligence ethics, technological alienation and the rights and interests of the marginal groups. The contemporary Chinese American science fiction writers combine science and technology with realistic ethical problems in their works, exploring various ethical dilemmas between the development of science and technology and human development and try to seek the scientific ethics of the harmonious development of human and science and technology. On the whole, the Chinese American science fiction shows the tendency of rejecting the western instrumental rationality and firmly believing

¹ Calliagnosia is a kind of technology in the work of Linking What You See: A Documentary, which can interfere with or stop people to make the aesthetic responses on different faces.

that human can counter-control technological alienation by means of moral control of technology. The way of thinking and the universal humanistic care in Chinese American science fiction, which transcend ethnic barriers and shows a kind of global ethics, have a positive and practical significance for building a new world order of harmony and fraternity.

REFERENCES

- Anderson, M., & Anderson, S. L. (2007). Machine ethics: Creating an ethical intelligent Agen. *AI Magazine*, 28(4), 15-26.
- Asaro, p. M. (2006). What should we want from a Robot ethic?. International Review of Information Ethics, 6(12), 10.
- Asimov, I. (1950). I, Robot. New York: Gnome Press.
- Brooks, R. (2000). Will Robots rise up and demand their rights?. *Time.*
- Chiang, T. (2010). *The lifecycle of software*. Michigan: Subterranean Press.

- Huang, B. (2013). Interview: Ted Chiang (Part Two) [OL]. *The Asian American Literary Review*, 24 May 2013.
- Ken Liu, The Inherent Commonalities Between Minority Literature and Science Fiction, http://www.chinawriter.com. cn, 24 September, 2012.
- Lin, p., Abney, K., & Bekey, G. A. (2012). *Robot ethics: The ethical and social implications of robotics*. Cambridge: MIT Press.
- Marx, K. (1982, Feb.). *Friedrich Engels* (Bureau of Compilation and Translation of Works of the Central Committee of the Communist Party of China, Trans.). People's Publishing House.
- Mumford, L. (2002). *Technology and Civilization, Technology and Culture*. 2002.
- Torrance, S. (2008). Ethics and consciousness in artificial agents. *AI & Society*, 22, 501.
- William, C. R. (2007). The ugly truth about appearance discrimination and the beauty of our employment discrimination law. *Duke Journal of Gender Law and Policy*, 14(6), 153-158.