A Post-Humanist Study of Ted Chiang's Stories of Your Life and Others

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Abstract: Under this context of post-industrial era, science fiction, a literary genre derived from Gothic novels, has captured the crisis faced by the current humanity. Taking imagination as a tool and future science and technology as focus, Sci-fi has become a specific kind of literary critique for the current society. Ted Chiang, one of the most renowned and awards-winning contemporary Chinese-American writers, has shone on the field of science fiction, and Stories of your life and others, a science fiction novella collection, is one of Chiang's most significant works. Stories of Your Life and Others explores the evolution of human nature, and recreates the eternal problems of the relationship between science and human itself/human society under the background of the multidimensional post-human space. From the perspective of post humanism theory, this paper attempt to explore the technical aesthetics, philosophical thinking and humanistic care in Chiang's work, and to clear the path in terms of the relationship between human and technology, human and the universe, so as to picture the blueprint of future living environment of human beings, predict the common destiny of mankind in the future, provide a paradigm for the practice of science and technology in the post-human era and the discussion of post-modern science and technology ethics.

Keywords: Post-human, Post-humanism, Science Fiction, Ted Chiang.

1. Introduction

1.1. Ted Chiang, Stories of Your Life and Others and Post Humanism

In the late 18th and early 19th centuries, along with the Enlightenment and the Industrial Revolution in the Western world, science and reason became the keywords of its era, and at the same time, science fiction, a brand new literary genre has entered into the public’s eye. Science fiction tradition originated from Frankenstein, made it a descendant of Gothic romance and the industrial and scientific revolution of the early 19th century. Darco Suvin has proposed in 1972 what is still the most receivable definition of science fiction in the early 19th century. "Science fiction is a literary genre for which the existence of estrangement and cognition, and the interaction between the two" (Suvin, 23). Science fiction as a literary genre is a departure from fantasy and children's literature, and is a continuous imagination of the relationship between science and society, accompanied by the high speed of contemporary science and technology development.

Currently, the writing frontiers of Chinese-American works expand from autobiographical novels, Bildungsroman, to more abundant and diverse fiction works, among which science fiction has now entered the literary field as a strong branch of contemporary Chinese American literature. In the writings of Chinese-American sci-fi authors, the issue of race is often metaphorically presented as a conflict between humans and non-humans (often as aliens and robots). Accompanied by the images of aliens as colonizers or native inhabitants, the transplantation of colonial behavior into imaginative literary spaces makes it possible for science fiction to explore post-colonialism and post-racial conditions.

Ted Chiang is one of the most reputable contemporary Chinese-American science fiction writer. He has won Hugo Award and Nebula Award several times, and are the recipient of the John W. Campbell Memorial Award for the Best New Writer. After graduating from Brown University with a degree in computer science, he continuously worked in the filed of software industry and writing science fiction in spare time. Story of your life, a science fiction novella, won the 1999 Sturgeon Memorial Awards and the 2000 Nebula Award, and in 2016, the science fiction film adaptation of the novella, "Arrival," was released, drew much attention about the original novella collection, Stories of Your Life and Others.

In the era of post industrial times when development speed of science and technology is way beyond our expectation, AI (artificial intelligence), robots and other conceptualized "non-human" beings gradually exist in our daily life, the identity of human subject is constantly impacted and reshaped. Science fiction, as a literary genre derived from Gothic novels, uses imagination as a framework and takes future science, technology and humanistic environment as a focus to capture the crisis faced by current society, becoming a literary post-humanist reflection and pondering. It forms an extension of contemporary humanities and technology and cultural phenomena, and digs deep into the complex human nature behind technological development and ethical crisis, constantly exploring on contemporary technological society. As a philosophy of the times, post-humanism is a philosophical and cultural thought with broad influence in the contemporary academic field. It is not only a reflection of liberal capitalism of our times, but also a response to the post-industrial society, hence provide us an access to re-recognize the status of human beings in the world of reality, reexamine the people who used to be regarded as "the measure of everything" and "the center", and recognize the world that we thought was clearly known. Ted Chiang, as a science fiction writer, takes advantage of his profound computer science knowledge and wild fantasy in his novels to create a magnificent imaginary world, expands the boundary of readers' imagination, simulates and presupposes the future technological development and ethical disputes of human beings in an imaginary world, and puts forward possible solutions and attitudes. His exploration of science and technology, has gone beyond the strict scientific techniques...
and rigid moral conventions. Chiang’s works show sympathy and tenderness for the vulnerable and full of humanistic care. Taking near future as background, Chiang explores the evolution of human nature, and recreates the eternal problems of the relationship between science and technology, human beings and human society under the background of the multidimensional sci-fi space. The span of Ted Chiang’s works covers from literature, philosophy, theology and sociology, while in the current academic circles, the value of the works of this outstanding science fiction writer has been underestimated. The research gap does exist and urged to be filled by new research methods and perspectives that urge to be considered and innovated. All these factors above provide a proper research space for this thesis. From the perspective of post humanism theory and interdisciplinary research methods, this thesis examines Ted Chiang's collection of short stories and novellas, explore the technical aesthetics, philosophical and humanistic elements, as well as the relationship between human and technology, human and the universe, and to picture the future living environment of human beings, caring for the common destiny of mankind in the future provides a paradigm for the practice of science and technology in the post-human era and the discussion of post-modern science and technology ethics.

*Stories of Your Life and Others* is a novella collection contains most of Ted Chiang’s early important works, including *Tower of Babylon, Understand, Division by Zero, Story of Your Life, Seventy-Two letters, The Evolution of Human Science, Hell Is the Absence of God, Liking What You See: A Documentary.*

The current status of research at home and abroad shows that the relevant research materials are relatively insufficient, while domestic researches on Ted Chiang shows a scarcity that does not match the achievements of his works; most of the studies shows the scarcity of the application of literary theory, and a majority of them focus on the perspective of translation, linguistics, and film adaptation. However, it is worth acknowledging that these studies have broadened the perception of Ted Chiang's works and even science fiction literature, and have provided some implications for the academic community. In addition, compared with foreign studies, the research on science fiction from a post-humanist perspective in China is relatively thin. Due to the popularity of sci-fi as a particular kind of literature is still relatively new and novel for the reader and China, and the pace of technological development shows imbalance in time between China and western countries, therefore, the choice of post-humanism approach can fill the theoretical gap in this area. With the increasing attention to post-humanist theory, science fiction as a kind of literature that echoes the requirement of its time, is destined to be examined, and is bound to receive increasingly attention as an important part of literary field. In recent years, scholars have been analyzing and pondering the changes and problems brought about by the post-human era to varying degrees, such as the vision of the future existence of human being, the reflection on the modernity of science and technology, the discussion of the dilemmas faced by the humanities, the study of theoretical paradigms, the concern for machines and human race. The absorption and reference of post-humanist theoretical trends have greatly enriched the study of many cultural phenomena in literary circles, expanded theoretical horizons of that can be applied in science fiction. Thus, in general, there are still large gaps in the research area of Ted Chiang’s work, and there are still new research methods and perspectives that need to be bridged and innovated, provide a proper research space for this thesis.

As is well aware that the increasingly amount of non-humans has enter into human being’s active field, the identity of the human subject is under constant impact and reshaping. As a new discourse, post-humanism is reborn in a rebellion against and beyond traditional humanism, confronting the identity of the human subject and human supremacy, pointing out the the direction of possible ways in the future. In particular, the contemporary literary/writing subject, is now forced to enter the field of reflection and reconstruction.

Post-humanism focuses first of all on the critique of the concept of "human being" as the cornerstone of humanist theory, that human being is not a species with a specific essence of supremacy, with an eternal and unchanging humanity and human nature. In fact, the human being is a social construct, a product of history, and a prescribed product of various social, political, economic, and cultural interactions.

Post-humanism takes issue with the centrality and superiority of the human race. Philosophical humanism of all kinds take anthropocentrism as their assumed theoretical premise, exalt humans as supreme, and place the being of human race at the center of reality and history. According to post-humanism, this is a form of megalomania, a sign of the attempt to regard humans as Gods, or at least God-like figures. Richard Schechner, states in his work *The End of Humanism,* argues that the so-called end of humanism is the end of the megalomaniacl tradition. The privilege of humanity is considered to be the legacy of the renaissance tradition. In the view of post-humanists, the subjectivity honored by humanism is not a deep-rooted philosophical reality hidden in a superficial role played by the scientific study of psychology, sociology, etc. It is a superficial phenomenon that has no deep structure or profound rationality that needs to be explained. Post-humanism takes decentralization as a weapon to decentralize the self. The traditional self as the center is discarded as an illusion, a product of old time. Post-humanism shows the attitude of human beings as non-identical, pluralistic beings. With regard to the attack on the anthropocentrism, post-humanism further undermines the priority and autonomy of the person. In this regard, the post-structuralist scholar Michel Foucault proposed his own archaeological approach to the study of "man" and his findings shocked the entire academic field. According to his analysis, the Western concept of the respectable "man" itself is not an eternal and infinite being, but a conditional product of a particular time and particular knowledge. In response to Sartre's view of existentialism affirmed the existence of man, and was the true philosophy of its time, Foucault argued that the so-called concept of man is merely an epistemological construct of a particular historical period. Not only is the human being finite, but the so-called autonomy and creativity of the human being is also a myth. From Foucault’s point of view, man is not a dynamic creator as humanists thought, but an imaginary one. Contrary to the belief that man is the constructed concept of norms in scientific discourse, man is now exposed by Foucault as nothing more than a "category" created by these norms. Humans have always been accustomed to agree that the individual or human subject, in some senses, is merely the superficial result of an impersonal system of language or thought. Therefore in the sense of post humanist, the subject is banished and marginalized. Human beings, initially considered the ultimate root and constitutivist
2.1. Decentralization the Concept of Language—Sapir-Whorf Hypothesis Applied in Extraterrestrial Languages

The mission of science fiction dismantling anthropocentrism can be linked to its relevance to post-colonialism. As a literary genre, science fiction often forms an extension of contemporary humanities and technological and cultural phenomena by imagining and depicting the future world of humanity, digging deeper into the complex human nature behind technological development and ethical crisis. In the writings of Chinese-American science fiction, the issue of race is often metaphorically presented as a conflict between humans and non-humans (usually as aliens and robots), and in the process of adjusting in current racial conflict, physical anxieties such as skin color, body form, and language can be seen as a projection of racial essentialism. Moreover, the images of aliens are often portrayed as colonizers or colonized inhabitants, also known as, the Other in the universe, hence the transplantation of colonial practices into imaginative literary spaces has made it possible for science fiction to explores post-colonial and post-ethnic conditions. In the context of post-humanism, where the concept of the Other is not merely limited to the African and Asian ethnic groups, but also the non-human Other in its theoretical scope, including machines, animals, even the planets. Science fiction imagines contact with aliens and the Others, transposing the act of colonization to a different time and space, and the concept of post-colonial culture is usually reproduced through the image of alienated Others. On the surface level, science fiction rarely deals with racial and colonial conflicts, but in essence, the self and other is metaphorically replaced with human and alien dichotomy. In science fiction, race is often ignored or incorporated into the images of the aliens and human beings, and the inter-planet conquering and travels are related to the space occupied by the more “advanced” side. The self/other is often represented in as the human/machine paradox, exploring the subjectivity of post human or post creatures in the “third space” in the case of imaginative world. The issue of post-colonialism in science fiction is thus reproduced through post-humanism, which is undoubtedly an inheritance and development of both of the academic thoughts, while also actively exploring the possibility of constructing a world that the Other will be respected and treated fairly in terms of reality.

In Story of Your Life, Ted Chiang's attempt to achieve de-anthropocentrism in a story in which a human linguist make contact with aliens, and gradually acquires their language, in that the special features of this language blurred the division of time, the linguist experienced a total subversion of the way the universe is perceived.

The contact with aliens has become a major heated science fiction theme since 1990s, and is still a quite fascinating topic to arouse the curiosity of the audience. When it comes to American Science Fiction, the theme of ethnicity is reflected in the narrative, where the relationship between humans and aliens was used to reproduce ethnicity: the conflict with aliens symbolized the controversy within human groups, and aliens became a science fiction expression of the other through the mimicry of the real conflicts within human race.

As a science fiction work, Story of Your Life subverts the human supremacy from several aspects, the first one is to distort the perception of time, that is to destroy the inner logic or order within human beings. Since the 20th century, science and technology have advanced by leaps and bounds, political and economic development has accelerated, and the advent of the Internet era has greatly altered public’s perception of time, and time consciousness has become closely linked with and transformed into spatial consciousness. Story of Your Life incorporates postmodernist narrative elements in its narrative technique, shifting the attention to linear chronology to a kind of spatial juxtaposition caused by transient inclusive imagery of characters and events. The narrative is narrated with a syncretic spatial narrative, which achieves a decentralized effect on the temporal element through juxtaposition, fragmentation of plots. At the beginning, the narrator’s attitude towards heptapods is of no difference with most of the humans, this is being suspicious of a completely new civilizations. Yet as the narrator gradually acquires their language, she changes her attitude as she gradually gains insight into the past and the future, and foreseeing the life of her soon-to-be-born daughter. "The past and the future blasted into simultaneous juxtaposition, my consciousness became ashes half a century ago, time had not yet arrived had become ash. In just one glance, fifty years of my life are in my eyes. And, your life,too“(Chiang, 118). The protagonist’s daughter's past and future are superimposed together, as if there is difference between the past and the future, only the present that matters, and the daughter therefore exists earlier in the time line.

The narrator of the story is deeply influenced by the alien civilization(heptapods), especially the writing system of their language, which corresponds to their unique way of perceiving the world. Humans develop a coherent mode of consciousness, while the heptapods develops a synchronous concurrent mode of consciousness. Humans perceive time in sequential order, and the logic of events is cause and effect. In contrast, heptapods perceive all time simultaneously; past, present, and future have no boundaries in their eyes, therefore, cause and effect is meaningless to them. Through contact with the aliens, the linguist gradually gains the special part of the outlook as she learns the language and her way of seeing the world has altered into a mixture of human and heptapods.
According to the basic content of Sapir-Whorf hypothesis, different forms of language correspond to various ways of thinking, and the subject's use of language represents his understanding of surroundings and behavior patterns. The essence of the Sapir-Whorf hypothesis explains whether language reflects thinking or creates thoughts, consists of two main points: first, that the language people speak determines their understanding of the world. This is linguistic determinism. Second, different languages represent the reality of the same society. The image of the world is proportional to people's linguistic system. The basement of language is grammar. In a certain way, grammar shapes the mindsets and ideas of its user. The formation of thought and grammar are inseparable for the fact that the world is organized through people's inner language. Unless people have the same linguistic background or are consistent in some way, they will not think in a unified way even when confronted with the same phenomena. In short, language is a tool for expressing ideas, a vehicle for communicating, and reflects the thought processes of the speaker and the cultural patterns he or she adheres to.

It may seem impossible to predict the future, but in the novella, according to the Sapir-Wolf hypothesis, the protagonist, as a linguist has mastered the language of heptapods, is able to see the all events from the perspective of a four-dimensional being. Language is a vehicle for thinking and human language is linear language, making the logic of human languages must follow and obey chronological order, and thus the mindset of human beings is formed in a linear way. The alien heptapods use a special circular, non-linear script that resembles ink painting as their writing form of language, and is extremely abstract just like the ink painting of traditional Chinese painters. "Its words have no fixed order of combination, and its conditional clauses do not even have a common order ...... heptapods speaking system can have many, many layers, forming countless levels of cascading modifying clauses"(Chiang, 114). In the view of heptapods, there is no cause and effect, the cause and effect are already present at the same time at the beginning of its emergence, or the concept of beginning does not exist at all. While with the linear thinking habit, earthly humans assume that the aliens already have the holistic power of predicting the future, what they experience is just practicing their predictions.

After acquiring the language of heptapods, the linguist discovered that her mind was composed of a mass of pictorial symbols, and even "suddenly realized that her mind was not expressed through the voice of her heart! The mind's eye saw a mass of languages unfolding like a mist on a window glass! ...... The words are fully formed in the mind before they are written, and even more complex ideas can take on a written form at once and at the same time"(Chiang, 127). The thinking of the heptapods is consistent with its words. The logic and consciousness unfolds simultaneously rather than continuously, like a line, as in the case of human beings. Chiang deliberately depicts he linguist's memories as not chronological, present the past and the future in a seemingly equal way, to mimic the mindset of an alien as well as leave a hint for readers. For that fact them the language heptapods uses is just for the confirmation of their action, the predestination that there are not cause and effect is certain. Since the fate of mankind is already predetermined, there is no need for man to experience it. Thus, after mastering the language of the heptapods, the linguist changes the way she perceives her life. After getting the prediction of her daughter’s death, she still makes the same choice firmly to meet her destiny bravely, she will marry her husband and give birth to her lovely daughter. Due to the juxtaposition of past and present, the overlapping and mutual reference of reality and fictional background, spatial juxtaposition greatly dissolves the narrator's sense of chronology and relieves the trauma of memory.

The hybridized view of time and space between human and alien civilizations is also reflected in the use of tense, as the narrator has apparently experienced all the events in the story, but uses all the future tense in the narrative to tell the story of her life in the face of her unborn daughter. "From the beginning I knew the end, I had chosen the path I would take, the path I must take in the future"(Chiang, 98). The mother sees her daughter's fatal death, but still embrace it gladly, and would rather returning to the beginning of her life countless times and choosing to follow the “predestination”. In this case, the supremacy of human centralism is weakened by the existence of predestination. In the basic social value of humanism tradition, a man can build his career and bright future with his own hands and efforts, while Chiang mocked and satirized this existing mindset by destroying the logic of cause and effect, by proposing a seemingly sci-fi predestination to show that even if the outcome is certain, the way of embracing one’s life is still worthwhile.

The juxtaposition of space helps the narrator to dissolve the impact of ephemeral time, thus diminishing the trauma caused by the death of the daughter and the fading of the aliens. With regard to spatial juxtaposition, it refers to the juxtaposition of imagery and allusions, symbols and connections in the text that facilitate the process of narration beyond the narrative, so that they achieve a continuous reference and contrast in the text, thus forming a whole. The transformation of spatial forms represents the narrator's desire to change the reality of the world, to seek a timeless quality of time in the exploration of spatiality, and to frame the daughter's life in a co-temporal time.

Ted Chiang's analogy between intergenerational communication and interstellar communication is naturally inextricably linked to Ted Chiang's Asian identity, which inevitably creates a dilemma of inter-generational communication. Ted Chiang's way of expressing intergenerational communication is more subtle, using his unique writing style to fulfill the effect of de-ethnicity, reflecting the unique combination of ethnicity and post-humanism in Chinese science fiction.

2.2. Decentralization the Concept of Space—Reflections on the Heterotopias of The Third Space

Science fiction focuses on the exchange and transformation of cultures through spatial contact and change, which is somewhat related to the study of space from a post-humanist perspective. While post-humanism focuses on the complex power relations between self and other, science fiction puts weight on the basis of colonial practices. Scholars have argued that science fiction itself is a fantasy of empire, emerging from industrialized empires such as the United States, Britain, France, Germany, and Japan, as a reconciliation between national cultural traditions and the emergence of global capitalism. Said explains how the West constructs the other (the Oriental) based on its own needs and desires, and post-colonial scholars such as Homi K. Bhabha demonstrate the transformations and dislocations that
colonization brings to both the colonizer and the colonized through a focus on discrete identities. The contact of different cultural forms in a limited space produces new hybrid identities that are "neither one nor the other", and such hybrid intersubjective identities are formed in the context of post-colonialism by the projection of the self onto the other, the inward projection of the other, and mimesis, which can be summarized as the "becoming subject" identity in post-humanism. In the process of exercising a certain identity/role, the Other can transform and deconstruct the hegemonic culture's prescriptive discourse on identity/role, and in the process construct the subjectivity of individuals and communities, thus achieving the goal of removing anthropocentrism.

*Tower of Babylon* depicts the story of mankind's attempt to approach the place of God by building a tower to the sky, only to return to its terrestrial origin, is a great masterpiece of the integration of western and Chinese American cultural legacy. Ted Chiang rewrites the story from the Bible Old Testament into a compelling science fiction work. The characters in the novel are religious, but it is not God's oracle that guides them to build the Tower of Babylon, and this tower seemingly "relying more on engineering knowledge than on prayer" (Chiang, 9). Ted Chiang uses his own creation to explain the differences between science fiction and fantasy, infusing the mythological story with scientific details; not a single deity appears in the novella, and everything that happens can be explained by physical knowledge. The presence of *Tower of Babylon* creates a kind of mysterious and unrealistic narrative mood that blurred the boundaries between reality and fantasy. According to the Old Testament, after the flood, everyone spoke the same language at first. Noah's descendants grew in number and spread across the land, so they migrated eastward. In the land of Shinar (near ancient Babylon), they found a plain and settled down there. The city of Babylon, was built because of the common land, so they migrated eastward. In the land of Shinar (near ancient Babylon), they found a plain and settled down there. The city of Babylon, was built because of the common language and cooperation of all, and was prosperous and beautiful. With its people decide to build a tower reaching to the sky. this city alarmed God, who was enraged by the ignorance and arrogance of mankind and decided to punish the arrogant human beings. God then confused the language of mankind and scattered them all over the place, so the Tower of Babylon was abandoned halfway, and mankind's harmony ended in chaos. The Tower of Babylon is not only found in religious stories, but also in the history, which was built in 610 BC and stood in the city of Babylon at that time. According to Herodotus, an ancient Greek historian who traveled to the city at the time, the Tower was the tallest building in the ancient city of Babylon. It was 98 meters high and divided into seven floors, with a staircase leading to the temple at the top of the tower, a spiral passage around the tower, with seats in the middle for the gods to rest. This existence between reality and fantasy provides fertile ground for science fiction thought experiments. Although there is no sign of God's presence throughout the story, God seems to be the narrator who records the actions and words of the characters outside the story, telling the story of mankind from an omniscient perspective.

At the beginning of the novella, the height of the Tower is described as follows: "If the tower were lowered on the plain of Hillah, it would take two full days to walk from one end to the other. When the tower stands facing the sky, it would take a month and a half to climb to the top from the ground" (Chiang, 14). The vertical height is transformed into horizontal distance, and this substitution of vertical and horizontal directions is both a reversion to the perspective of the Babylonians at that time and a rich thematic connotation. The main character of the story has never seen the Tower of Babylon before, but unknowingly participated in the construction of it. In his works, Ted Chiang discusses the motivation for the story, one of the important points is the contempt for the workers' lives in the construction of the Tower of Babylon: "If a man lost his footing and fell, no one would feel particularly bad, but if it was a brick that fell, the bricklayer would be so sad that he would cry because it would take a year to replace a brick" (Chiang, 24). And the inhumane treatment of the alien miners was the same as that of the first Chinese American laborers. The American historian and political scientist William Foster has written that "the Chinese, primarily workers, have played a large role in the history of the American West ...... They began to migrate to the region in the early 1850s, just as California's famous Gold Rush was in full swing in California. For decades after that, they worked in all the mines, forests, ranches and construction sites of the American West ...... (Chinese) built the major railroads in California." (Foster, 246). Ted Chiang recreates the ethnic memory of Chinese American workers building railroads in the horizontal direction with the story of the Babylonians building the Tower in the vertical direction, contrasting the contempt for life with the reverence for technical tools. Unlike the active intervention of God in the Bible, God as the narrator is aware of all human actions, but remains outside the story and does not intervene in the foolishness of human behavior. As a representative of the miners, the protagonist enters the vision of the omniscient narrator and becomes the focus of the narrative. Just when the protagonist is about to reach the vault of the celestial space after all the hardships, it seems that he has encountered the second great flood in which God punishes mankind, and wakes up to find himself back on the ground.

The earth then became two juxtaposed symbols on the cylinder and the statement of "people should stay where they are supposed to be" (Chiang, 17). The real journey is back to the point of origin, and by ascending vertically, man climbs the ladder to the heaven in an attempt to evolve into an omniscient being similar to God, only to prove once again that he is merely one of all the ordinary people on the ground. As a typical marginalized other, the protagonist was bound to stay the horizontal space, with no possibility of ascending. "Thinking horizontally in the vertical world is the curse of ethnicity", and looking back at the early Chinese immigrants, most of them were exported in the form of laborers, and could only engage in the bottom jobs such as miners and laundry workers, and climbing the ladder of the American social class was a foolish fantasy. Only by relying on science and technology and mastering scientific knowledge can Chinese Americans break through the limitations of their identity as the Other, break the established structure, create the history of their own, as well as leaving their name in a new chapter of human history. Chiang's attitude towards class ascending is relatively negative as can be seen in this story, even with the advanced science and technology, the Other is still unable to achieve identity transcendence, and the ending the protagonist returning to the ground symbolizes the failure of identity change, and the ethnic Other remains and will remain in "The Third Space" for a long time, continuing to make their way in the horizontal direction. In this case, Ted Chiang dissolves human arrogance through the depicting of spatial immobility,
implies human’s hubris with an ostensibly religious mythology “Tower of Babylon”, and dispels the illusion that human technology is omniscient in order to dissolve anthropocentrism. This novella expresses Chiang’s criticism and reflection on advanced science and technology through a large number of metaphors and allusions to the Bible, thus achieving the effect of cultural integration. Tower of Babylon symbolizes the achievements made by mankind through science and technology. No matter how remarkable this achievement is, it will eventually reach a certain limit. The space on the ground symbolizes the foundation of mankind. No matter how high a man can climb, he will eventually fall back to the ground, shows the necessity of worries towards the technology centrism in the post-industrial society.

3. The Death of Man as a Metaphysically Construction

3.1. The Physical Death of the Subject: The Dawn of the Post-human Age

As early in the 1980s, Donna Haraway pointed out in A Manifesto of Cyborg that “we are all fire-spitting female monsters, a mixture of theoretically fictional machines and living organisms. In short, we are all Cyborgs” and this “has the potential to change human nature and thus lead us into a ‘post-human’ phase of history”(Haraway, 12). Under the influence and impact of computer science, the Internet, metaverse, genetic cloning, and other high-tech products, the traditional sense of human is being rewritten, and humans are using increasingly advanced artificial intelligence and machines to control and transform the object (body) as never before. In Bodies of Tomorrow, Sherryl Vint reminds us that “the rapidity of technology is quickly making the concept of ‘natural man’ a thing of the past, and we have entered a post-human era”(Vint, 35). The boundaries between human and animal, human and machine are increasingly blurred, and the detachment of life experience from the natural body, making questions like "what is the body?", "what constitutes the body?", and "what is the meaning of the body" gradually become a common anxiety among the public in post-human society. Questions such as how technology affects race and ethnicity, and how individuals develop new identities in a contemporary world of rapid technological development are particularly relevant in the post-human era is particularly urgent. As post-humanism calls for the return of the body, it emphasizes immanence and embeddedness, actively constructs the post-identity of becoming Other through the hybridization of the body in the vision of technological culture, embraces the differences between the self and the other. This hybridization of identity between fluid subjects is, in turn, a directional innovation.

In Understand, the narrator tells the story of how, in a deep coma, he gains super intelligence and extraordinary insight through a body transformation therapy, that is hormonal K therapy. The narrator then meets and confronts the other super human, after this encounter, the view of two super human eventually disintegrates and the protagonist passes away.

The process of the protagonist being treated in the hospital is of great important in this story. After an accident, the narrator suffers a severe brain injury and is hospitalized as a vegetable. As a patient stuck in the hospital, the narrator is tested numerous times by doctors, and the test result of his cognition and behavior has become a case for medical observation. The doctor examined and quizzed the narrator and the narrator followed exactly as he was told and answered the questions step by step in each one of the tests. Hormone K therapy was able to "regenerate a large number of damaged nerve cells"(Chiang, 35), and as the medicine portion was injected, the number of regenerated cells increased, and the quantity of cells brought about a qualitative change in the body, and the narrator's body functions were greatly enhanced, and he gradually grew tired of the patient role who has constantly being watched, tested, cured, and prescribed by the authority. No matter how high the scores are in the tests, the doctors always regard the narrator as a patient urgently need to be fixed, and that is a metaphor of marginalized other in the society. A research object, without subjectivity and self awareness, and are unable to establish an equal relationship of communication and dialogue. "Week by week, my interactions with the doctors became more and more tedious. They seemed to treat me as an erudite idiot: a patient who showed some signs of high intelligence, but was still a patient"(Chiang, 36). This psychological dislocation stems from the dominant culture's imagination of the Other, which is typically characterized by stereotyped roles of the Other. The narrator exists as a patient in the confinement space of the hospital, and it is the typical heterotopian space of power in the case of Foucault’s theory. In Histoire de la Folie à l’âge Classique, Foucault connects places of confinement such as hospitals, detention centers, prisons, and mental hospitals to the operation of confinement and its power, stating: "The insane are not the first and most innocent victims of confinement, but they are the first and most obvious victims of confinement. one of the most ambiguous yet most visible and enduring symbols of power"(Foucault, 210). Chiang's choice of the hospital as a narrative space has his political intention, that is to use the relationship between doctors and patient mimicking the power structure of different ethnic groups. Among different ethnic groups, the relationship of watching and being watched, judging and being judged has always been inevitable due to the imbalance of power distribution politically or economically. To escape from this doctor-patient power structure, the narrator proceeds to resort to hormone K, altering his body and mind through technological means to become a physical “super human”. However, as the effect of the medical means goes beyond the doctor's comprehension, as well as catching the attention of a much larger power structure (the CIA). After escaping from the hospital, he is monitored by the authorities and stigmatized as a psychopath and a criminal. The narrator tries to break free from the power space with the knowledge he gained through the transformation of the body(brain), which put him into a more tricky position, that is, the tangible power space, the hospital, has changed into a larger and invisible power space, the whole world. Foucault views factors such as spatial design, power relations, and practices for freedom as interacting with each other, rather than identifying one element as playing a decisive role. Knowledge, space, and power have coupled into a unified whole in modern era, and the three are so intertwined that it is impossible to eliminate the other variables by amplifying any one of them to the extreme.

The narrator continues to transform his body with the help of medical technology, creating a self as post-human, “God said, let there be light, and there was light. With the help of a new, more expressive language than I could have imagined, I came to know the self more clearly. God created order out of chaos with a single word, and I used this new language to
renew myself as a new person"(Chiang, 41). Regarding the post-human self-creation, Haraway in A Manifesto of Cyborg has spoken of Cyborgs as an orphan without parents, and has been created without myth of creation (Haraway, 2), where the narrator draws an analogy between the change of his own body from human to post-human and God's creation, demonstrating his willingness of re-create himself and his determination to transcend the limitations as a human being.

"I knew that my body was transformed, like an amputee's stump suddenly replaced by a watchmaker's deft hand, controlling random muscles with ease. I had superhuman coordination"(Chiang, 45). With a superhuman body and the corresponding cognitive ability that goes along with it, the narrator can no longer put up with the mundanity of the world, and his change has shifted from the transcendence of the human body to the transcendence of human identity, receiving a role change of identity from the other to the subject. At the same time, the narrator can perceive the existence of the other superhuman that is identical to him. In the latter part of the story, the protagonist encounters a second super human in the world, a second transformed human being: one is a pragmatist, determined on reshaping the world or even saving it; the other is an aestheticist, who would love to use his wisdom to explore the ultimate truth of the universe and decipher the laws of the universe. Their worldviews are far apart, and their differences are unavoidable. "I love beauty, he loves humanity. Each felt that the other had overlooked a great opportunity. He sees wisdom as a means, I see wisdom as the ultimate goal"(Chiang, 61). This monologue shows that as long as there are multiple subjects, there are bound to be differences and disagreements, which in turn generate inter-subjective conflicts and trigger ideological hegemony as well as resistance and contestation of domination. While becoming post-human can transcend the issue of race within the human sphere, post-humans also form new racial and ethnic patterns within its own context. The narrator ultimately loses to another superhuman who is committed to overturn and reshape the world.

The disintegration of the narrator at the end does not mean death, but the enlightenment after "realizing" the ultimate truth of the world, which is another form of post-human body transformation, that is integrating itself into the earth and transforming life into another form of existence. What human beings really desire is to pass away in this eternal flow of becoming, the prerequisite for which is the loss, disappearance, and rupture of the self, the moment when the subject's body disintegrates, the moment when it merges with the network of non-human forces, the ultimate goal of all processes of becoming is to become the other, the moment of becoming a particle is the moment when the self merges with its environment, the moment when the whole universe becomes one. Becoming other is the final stage of the post-human paradigm, a flowing, empathic, joyful, open call to the Other. This step of procedure also marks, in a way, the transition to a larger natural cosmic order within the framework of literary criticism of Science Fiction.

All in all, in the rapid development of high technology, artificial intelligence, biotechnology and other high technologies, the human body in the traditional sense is becoming increasingly technologized and codified, and those who are addicted to online media and virtual space are evolving into cyborgs in science fiction. On the one hand, body anxiety is a metaphor for the cultural crisis of this era, is a constant reminder to maintain a necessary vigilance against post-modern culture; on the other hand, it enlightens people to resist the tyranny of technology in the name of differentiation and diversity, and to resurrect the logic of pluralistic salvation in uncertainty. In this case, Ted Chiang offers an in-depth reflection on the value of life and life forms, and through his narrative of the disappearance of the body and the collapse of the spirit in the post-human era, he demonstrates his anti-utopian stance that technology inevitably leads to oppression, and that high technology is used to organize, collectivize, functionalize, and ultimately dehumanize the human race. By critiquing the post-human existence and ethical dilemmas brought about by technological alienation, Ted Chiang attempts to place the raging technological development on a broader and deeper humanistic foundation, reflecting deeply on the current frenzy of technological supremacy and technology worship.

3.2. The Spiritual Death of the Subject: The Challenge of Religious Belief

Science fiction, though considered as an imaginary literary genre, isn’t totally concerned with the future, but with the present, the worries, interests, confusions and fears in its time. Ted Chiang's works are also concerns with not only the imaginary world but also the current panorama of our society, among which religious belief a important part. Hell Is the Absence of God cunningly depicts the religious confusion and anxiety about the earthly body, life and death in a time of high technological advancement, and about resorting to religious beliefs for their bodily anxieties. It explores how the spirituality and secularity of religion are balanced in contemporary society, questioning the rationality of religion and the need for human beings to accept a death of faith, that is, a spiritual death, in order to be spiritually reborn.

Ted Chiang himself had a rational attitudes towards religions. His parents did not instill any beliefs in him as a child, though he was influenced by mainstream American culture at an early age and still believed in the existence of God. By the time Chiang grew up into a writer, he gradually transformed into an atheist, interested in religion only as an abstract theory, and so it is in this story. Religions, represented by Christianity, are not only about the spiritual faith, which is believing in the existence of God - but also a behavioral indoctrination - acting in accordance with God's will (praying, doing good deeds, preaching, etc.). The doctrines that persuade believers can all be reduced to a simple triad: God is powerful (can show miracles, dominate the cycle of life and death, and judge at the end of time), and God is perceptive (rewards the pious and punishes the unbelievers), so believers should be devoted to goodness and serve God with devotion. Religion believers have been trying to prove the existence of miracles in various ways, and even exercising power through secular powers instead of God. Many of the historical debates between science and religion have also mostly focused on whether the concepts of miracles, heaven, and hell exist. Ted Chiang, on the other hand, has a different approach and cuts from a different angle. In Hell Is the Absence of God, he creates a world where the existence of God is unquestionable, where miracles such as angels descending to earth are conclusive, where heaven and hell can be witnessed. In other words, the major premise of the christian religious faith is no longer in dispute. But in this world, the minor premise is not valid. Angels descend to earth like lightning and thunder, merely existing on a part with natural phenomena. God acts completely without logic, and there is no correlation between
mortal belief or disbelief, good deeds or evil deeds, and the emergence of miracles is random.

In this story, God's existence is certain, and furthermore, God's omniscience can be considered unquestionable; the believer strives to explain everything, interpreting positive events, such as divine healing, as God's goodness, and negative events, such as suffering, as divine wrath or trials. But such an explanation is inevitably difficult to justify, because many of the outcomes in this story are completely random and unrelated to karma, such as the fact that the innocent can suffer while the rapist can ascend to heaven. All of the plots point out to a question: why are there so many believers if it is difficult to justify? Some of them have their souls changed after witnessing the light of heaven and magically begin to love God unconditionally; some of them cannot understand what God does but still try to explain it; some of them have to forcefully find reasons to believe because they have to ask God.

There is no shortage of people who refuse to fear God. Some believe that fearing God for personal purposes is insincere because they cannot find a reason to love God unconditionally and believe that loving God conditionally is irrational; others believe that God acts randomly and is not worth believing in, and that it is better to decide for oneself what to do rather than to look to God. And at the end of the story, several characters end up loving God because they witnessed the light of heaven. Even though their previous attitudes toward God were different, their previous encounters were very different, and their subsequent destinations were not all ascensions. The proposition of good and evil never holds true, seeing that God is not absolutely righteous; the inevitability between hitting the light of day and ascending to heaven is also broken by the special case of Neil, so that, at least at the last moment, the soul worth saving is not necessarily saved. Only unconditional adoration is common and inevitable.

This is a paradoxical dilemma in reality: when you ask a believer why he believes in God, if he can give a reason, this piety seems no longer unconditional; but if he cannot give a reason, it seems that such a belief is not firm enough and is difficult to justify. So in this story, the author finds a reason for this lack of reason, to witness a miracle.

“If you are to love God, you must be mentally prepared to love him unconditionally, no matter what he has in store for you. God does not mean justice, mercy, or compassion. Only by understanding this thoroughly can you become a true believer”(Chiang, 89).

Whether atheist or believer, there is no doubt that the worldview of these two groups of people has been shaken by the God in the story. The greatest difference between two sides is no longer exists, but the question of what God means has become a new one. Ted Chiang tends to see religion as a spiritual support in an age of extreme technological advancement, yet as a spiritual support, God is a supreme power incarnate without logic, without compassion, but full of randomness and chaos. As a spiritual believer, Neil, who was originally wavering in front of the conclusive miracles, firmly established his faith. But as a preacher in deed, in the face of miracles that do not distinguish between good and evil, Janice's preaching loses its edifying power. And Ethan, as a bystander, can perhaps be seen as Ted Chiang's own spokesman. There is no doubt that the authority of religious faith has been dissolved and the authority of God has collapsed, and Ted Chiang has depicted a “death of God” in the sense of Nietzsche in his works, symbolizing the spiritual death of human beings in the post-humanist era, criticizing the technology worship that’s been prevailing the times. High-tech of our days shares similarity with Gods for the universal and powerful roles in the level of changing the life of the public, and the technology without the bound the moral and ethic can only cause chaos and misery, so as to criticize the dehumanization brought by technology and calls for the reborn and rebirth of new mental and psychological support for humanity.

4. Possible Orientations for Science Fiction

4.1. Building the Ethic of Technology

The radical transformation of nature by means of science and technology, as well as the counteraction of the laws of nature will eventually lead to human beings' own suffering. Therefore, if human beings wish to maintain the continuity under the dual effects of nature and technology, the anthropocentric principle that has prevailed since the industrial revolution must be abandoned. Humans are ought to recognize the intrinsic value of non-human natural beings and the harmony and inclusiveness of the laws of nature, evoke a natural conscience, and strengthen the relationship between human beings and nature in terms of mutual benefit and coexistence and organic unity. In this way, the human being must respect the right of all species to enjoy nature. Anthropocentrism advocates human interests as the yardstick for judging the relationship between human beings and ecology, and human intrinsic purposefulness as the indicator and basis for establishing social and cultural ecology. It is true that during the rise of industrial civilization anthropocentrism has advanced human civilization as a progress of human self-knowledge, but the limitations of anthropocentrism have led to the unequal relationship between environmental problems and human nature, and the prevalence of technological civilization and instrumental rationality has also put human beings at risk of alienation. The anthropocentric concept of all human egos as a measure of cognition has led to a rethinking of the relationship between human beings and technology and a reconceptualization of the contradiction and oneness of human society and nature. Human beings should consciously limit their production and consumption methods to what the ecosystem can sustain, especially not on the pretext of the opposition between technology and nature, and further attempt to rewrite the laws of nature with the expansion of technological power. In fact, human epidemics have been triggered by drastic social changes, and science has caused almost as many disasters as it has benefited mankind. It is not the evolutionary destiny to return mankind to a natural state like the horned horse, mankind can only continue along the technological development. But at least we should maintain a heart of reverence when transforming nature, try our best to maintain the original equilibrium state, and learn to live in harmony with nature.

In such a realistic context, Ted Chiang's exploration of the post-humanity of technology in his work is distinctly echoing our era. The increasingly obvious and prominent homogenization of technology will exclude human emotions, free will, etc. The Charter of Scientists, adopted by the Joint Council of International Scientific Associations in 1949, states that scientists are to promote science in the most beneficial way for all mankind, to exert their influence as...
much as possible to prevent its misuse, and to put weight on and develop the human values of science and technology. One of the distinctive features of Ted Chiang's science fiction novels is the way in which he sticks to a scientific concept for narrative interpretation while turning his pen to humanism. He seems to place the field of discussion in the future, and the objects of his analysis are technologies that seem far away from us, such as aliens and human transformation, but these issues can always be found and reflected in the current scientific practice, and some of the ethical dilemmas he depicts about in scientific research have even plagued human beings for generations. For example, body transformation in *Understand*, to improve and strengthen intelligence and physical ability of humans are shown in most of today's "superhero" movies. Body modification, genetic engineering, and other bioengineering projects are also frequently controversial. In fact, this controversy has not stopped since the birth of Dolly the cloned sheep, and in 2018, He Jiankui, an associate professor at Southern University of Science and Technology, announced the production of a pair of gene-edited babies, twins born with a gene modified to resist the HIV virus. Bio-engineering technology and medical inquiry have always been inextricably linked to the controversy of changing the purity of human genetic pool and reproduction methods. This controversy is increasingly invading the daily life of human beings under the development of society.

The Emergence of technologies such as big data, genetic technology, artificial intelligence, and nanotechnology, brings technological benefits to human society as well as the hidden risks and challenges. Such as AI technology frees humans from general intelligence activities to focus on various innovative discovery and invention activities. However, AI systems can pose a significant threat if they are out of control or used improperly for the lack of ethical judge involve. It is therefore crucial to maintain a critical and prudent approach to the ethical challenges posed by emerging technologies. Science fiction is essentially different from philosophical and ethical studies of science and technology in that it can design a field in which such controversies can be experimented and explored a priori through imagination and literary conception. The literary discussion of these issues makes the discussion more humanistic, showing a priori the possible ethical entanglements in the narrative of each story, predetermining the outcome from the field of science and technology, and focusing and provoking the "bystanders" and "ordinary people" represented by the authors and readers to have a better understanding of science and technology. thus providing space and inspiration for the discussion of scientific research and the construction of science and technology ethics at present.

4.2. Towards Ethnic Post-humanism

Science fiction as a narrative genre, with its origins in the scientific revolution in the Western society and its heritage in the Gothic tradition, is a literature of change that alienates the familiar through cognitive detachment. In science fiction, post-colonialism is usually not directly expressed as a conflict between races, but more as a post-humanist exploration. In the field of science fiction, post-humanism inherits and develops post-colonialism, and at the same time proposes a constructive exploration of decolonization issues that post-colonialism fails to address, making ethnicity an important topic of post-humanism in the science fiction field.

Traditional American ethnic writers tend to be fascinated with writing historical works that call attention to the issue of ethnic interests in a hybrid context. While this is not uncommon among ethnic science fiction writers, they prefer to explore the facets of human existence in modern society by looking through the lens of technological discourse and value evolution, or by exploring the relationship between technology and civilization, or by revealing how technology have created monstrous, inhuman creatures. Contemporary Chinese-American science fiction writers carry two cultural genes for cultural tourism in post-human society, actively digging out aesthetic objects from within one cultural system that can explain the current social situation and cultural phenomena, processing them empirically, and appropriating them into the narrative of another cultural system in the form of "memory objects," while the writers themselves have thus transformed from "memory holders" to "knowledge subjects". The writers take the cultural identity of "tourists" to integrate the Chinese experience into the reference system of modern social ills, search for the combination of Chinese experience and world conditions, use pictorial thinking and sensual intuition as the remedy to reconcile science-centrism and instrumental rationality, and use the remedy of "scientific worship" and instrumental rationality. The prescription is to use the hidden historical scene to contrast with the vain historical view after the separation of labor and value, and to replace the precise placement of technology with the holistic perception of existence.

For these tourists of the technological era, the primary proposition of the dual cultural background is not "where are my origins, but "what kind of works can I write through my ethnic experience". In the process of cultural wandering, they gradually feel the existential propositions, technological misunderstandings and ethical tests that are common to people of all ethnic identities and cultural backgrounds, and it seems that human beings do not break out from the many intrinsic qualities of the former technological age, but unconsciously draw closer to the new logos and enjoy it. For these tourists in cultural wanderings, choosing science fiction can maximize the area of wanderings; choosing the intervention of Chinese experience is the latest solution based on old propositions.

The works of Chinese-American science fiction writer Ted Chiang are almost devoid of any ethnic representation, but through post-colonialism and post-humanism, the ethnic sub-themes embedded in his works can be deeply explored. Mythology, aliens, superhuman bodies, and other thematic elements make his works present a post-humanist science fiction aesthetic. For example, although *Stories of Your Life* does not directly express any Chinese identity, it has a strong Chinese flavor in its interpretation of the object-meaning text and its recognition of the intuitive perception and thinking methods. Because of this peculiar language, they grasp the physical in a more intuitive way, and the technique of using language directly affects their perception of time.

Becoming post-human as a narrative strategy both creates a transcendence of ethnicity and reveals an ethnic sorrow across time and space. Thus, it can be seen that Ted Chiang does not avoid the ethnic theme, but adopts a writing technique that conforms to the characteristics of science fiction narratives (cognitive strangeness) to transform the ethnic theme into themes such as re-writing mythology, alien contact, and posthumanity, and through various substitutions, he realizes the science fiction reproduction of the ethnic theme and actively explores transcendence through thought.
experiments. It is worth pointing out that in Tower of Babylon and Story of Your Life, the search for God and the contact with extraterrestrials are explorations of the unknown, show the desire of human beings to go beyond the known and into the unknown on a spiritual level.

The post-human paradigm based only on spiritual transcendence is unsustainable and fleeting; the transformation of the human body by technology in Understand makes the post-human materialize and constructs the corresponding post-human identity on the enhanced body, which is the typical paradigm of contemporary post-human constructions. The dual construction of the post-human body and spirit provides the possibility for the transformation and dissolution of ethnic sorrow, and the exploration of post-humanism under the post-human philosophical paradigm of "becoming the other" is an important development direction for the study of Chinese American science fiction in the context of today's technological era.

4.3. Conclusion

Ted Chiang, a bright star in the Chinese American science fiction field, has demonstrated a rich imagination and profound humanist care in his works. Ted Chiang's works take the debatable entanglement of technological controversies as the starting point, reflecting on anthropocentrism, pondering the construction and collapse of technocentric heterotopia, and criticizing technological omnipotence based on humanistic concerns, thus forming a general context for his discussion of post-humanist issues. Ted Chiang constructs several representative dimensions of the ethics of science and technology that are most valuable for discussion, namely, the construction and disintegration of heterotopia in Story of Your Life, the sympathy for the tower building workers in Tower of Babylon, the critique of bioengineering in Understand, and the challenge and critique of religious belief in Hell is the Absence of God. His works explore three symbolic ethical issues of science and technology, namely, "the specificity of human language," "genetic engineering and human biological alienation," and "religion in the context of technological advancement". At the micro level, the ethical issues of the blurring of the objective criteria for determining human identity, the self-identification and self-empowerment of "post-humans", as well as the warning of the end of the earth and the reconstruction of the living environment are shown respectively, expressing deep technological reasoning, moral contemplation and humanistic concern. Behind this in-depth portrayal of the ethical issues of science and technology, Ted Chiang's subtle portrayal of the ethical dilemmas has been clearly seen.

At the same time, Ted Chiang's works are inevitably post-ethnic or post racial. As Ramon Saldivar points out that Post Race has become an crucial theme when it comes to the ethnic or post racial. As Ramon Saldivar points out that Post ethical dilemmas has been clearly seen.

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