

Rise, Characteristics and Evaluation of Chinese Climate Fiction in the Anthropocene

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Abstract: This study examines the evolutionary trajectory and social-governance characteristics of Chinese Climate Fiction (Cli-Fi) against the backdrop of the Anthropocene. Through historical periodization and textual analysis of representative works spanning 1900 to present, the research identifies six developmental phases: Sprouting (1900-1949), Popularization (1949-1975), Downturn (1976-1990), Revival (1991-2000), New Development (2000-2010), and Prosperity (2011-). The analysis reveals that Chinese Cli-Fi predominantly employs protagonists in climate-vulnerable settings to articulate three core concerns: social stratification (class rigidity, wealth disparity, family disintegration), environmental justice (ecological power struggles), and identity reconstruction. While demonstrating patriotic collectivism and technological optimism, the genre proposes mitigation strategies through institutional innovation and international cooperation. However, critical limitations persist in mechanistic understanding of climate crises and psychological depth in human-nature interactions. The findings suggest that Chinese Cli-Fi serves as both social-governance allegory and ideological vehicle, blending collectivist values with emerging global ecological consciousness, yet requires deeper engagement with scientific realities and humanistic dimensions to achieve transnational relevance.

Keywords: China; Cli-fi; Anthropocene; Environment

1. Background to the Rise of Climate and Climate-related Fiction in China

Over the past few millions, the Earth has been

alternating between cold and warm cycles. The cycles of climate change are far greater than human lifespan and imagination. After centuries of observation and research, climatologist finally found an indispensable link between the climate change and solar activity, and the concept has been widely accepted. However, global warming, sea level rise, forest fires, and frequent occurrence of extreme weather have brought uncountable disasters and losses to the world, and the increasingly serious issue of climate change has attracted widespread attention in the international arena. 1988 saw the establishment of the Intergovernmental Panel on Climate Change (IPCC), and subsequently, through international talks, national consultations, policy formulation, and publicity in the media and news, climate change has gradually entered the public eye. Subsequently, a series of climate framework agreements, such as the United Nations Framework Convention on Climate Change (1992), the Kyoto Protocol (1997), and the Paris Agreement (2015), prompted countries to take action to reduce greenhouse gas emissions in order to combat climate change and achieve sustainable development. In the new century, Paul J. Crutzen, a Dutch atmospheric chemist, proposed the concept of the “Anthropocene”, arguing that human beings have become a geological force affecting the Earth’s systems, and that the Earth has entered a new geological period characterized by global climate change at its core. This conceptualization puts the impact of human activities on the Earth in a crucial position for the first time, and calls for and prompts people to reexamine their own historical and cultural identities. It is against this backdrop that climate fiction was born, with the mission of helping humanity to imagine and visualize the possibilities in order to dispel the fear of the unknown and promote

awareness of climate issues.

As early as the beginning of the 21st century, the concept of climate fiction emerged. In 2013, Rebecca Tuhus-Dubrow introduced the notion of climate fiction in her work "Climate Fiction: The Birth of a Genre", highlighting *Far North* as hailed by *The Washington Post* as the first great cautionary tale of climate change [1]. In 2008, American journalist Dan Bloom coined the term "cli-fi" on his personal blog as an abbreviation for "climate fiction". In 2013, a segment on the topic aired on NPR's *Weekend Edition Saturday*, sparking widespread public interest in whether climate change has created a new literary genre [2]. Climate fiction predominantly revolves around narratives of climate change or crises, "depicting the existential dilemmas, mental states, emotional shifts, and value choices of humanity under climate anomalies. Through imagination and reconstruction, authors delve deeper into their examination, reflection, and aspirations regarding climate change issues" [3]. The pronounced didacticism of climate fiction underscores its role in disseminating viewpoints of scientific thought, particularly relevant for Chinese creators. For a considerable duration, not limited to climate fiction, all science fiction has been regarded by the Chinese government as a literary tool for popularizing scientific knowledge. And, even to this day, many Chinese still consider science fiction as science popularization literature, or merely as fantastical reading material akin to escapism.

As part of the science fiction literary landscape, the development of climate fiction in China has evolved in tandem with the broader trajectory of Chinese science fiction, undergoing six distinct developmental phases from inception to flourishing. Influenced by societal contexts, the evolution of China's climate and climate-related fiction exhibits a periodized history, categorized into Sprouting Period (1900-1949), Popularization Period (1949-1975), Downturn Period (1976-1900), Revival Period (1991-2000), New Development Period (2000-2010) and Prosperity Period (2011-).

2. Different Stages of Development of Climate and Climate-Related Fiction in China

The first period from 1900 to 1949 represents

the Sprouting Period of Chinese climate-related fiction. In China, science fiction emerged as an "exotic import" from the West. During the late Qing Dynasty, as a plethora of scientific and cultural ideas flowed into China, science fiction garnered appreciation from progressive literati. Indigenous Chinese science fiction during this era was largely influenced by translated works, such as Jules Verne's *Around the World in Eighty Days*. Prominent climate-related works from this period include Boyuan Li's *Iceberg and Snow Sea* (1906) and Zhengjun Gu's *Beneath the North Pole* (1939). It is noteworthy that this phase "inherited the roots of Chinese classical fantasy literature and culture Imaginations of future technologies in these novels often amalgamated with elements of traditional grotesque fantasies" [4], so it is featured a lack of scientific foundation and a tint of whimsicality in nature.

The second period from 1949 to 1975 corresponds to the Popularization Period of climate-related fiction in China. Following the founding of the People's Republic of China in 1949, the nation, in the midst of extensive reconstruction efforts, placed significant emphasis on cultivating the cultural literacy of its youth. Under the slogan "Marching towards Science", the country regularly translated Soviet and Jules Verne's science fiction works for children and adolescents. The fundamental requirements for science fiction during this period were to "serve industrial and agricultural production" [5] while also emphasizing scientific accuracy and contributing to the ideological education of children. The emergence of such works was in line with the demands of the times and politics, prompting some traditional literary artists to venture into producing popular science fiction. Among the earliest meteorological science fiction works in post-revolution China was Xingshi Liu's *Clouds in the North* (1962). This narrative follows the story of a meteorological dispatcher, depicted as "I", utilizing scientific techniques to guide warm and humid air currents from southeastern China to induce artificial rainfall in the drought-stricken deserts of Inner Mongolia. This work stands as one of the earliest instances of weather control depicted in Chinese science fiction, presenting a fantastical notion where rainfall could be manipulated according to the needs of various

regions across the country. The story concludes with the vast fields and crops in the drought-affected areas finally receiving nourishing rainwater, rejuvenating growth and fostering jubilant spirits among the populace.

The third period from 1976 to 1990 is the Downturn Period of climate-related fiction in China. By the late 1970s and early 1980s, an increasing number of Chinese science fiction writers began to realize that besides scientific popularization, science fiction literature should also possess the characteristics of traditional literature, such as the portrayal of human nature and social criticism. Consequently, a cultural debate about whether science fiction was pseudoscience ensued, resulting in the defeat of science fiction. For a time, almost all domestic science fiction publishing platforms were lost, leaving only one magazine struggling to survive. Since then, Chinese science fiction literature has been in an industry that has not received much attention. During this period, however, it is worth noting that in 1986, Xiankui Wu's *Dashing into the Typhoon* (1986) represented a significant genre of meteorological literature called "engineer science fiction". It tells the poignant story of a graduate student at a typhoon laboratory who pilots a nuclear-powered meteorological reconnaissance aircraft to collide with a typhoon in order to understand its formation and structure. Eventually, he sacrifices himself by driving the aircraft to gather lightning to save a group of fishermen, embodying a strong spirit of heroism and romance.

With the support of some steadfast proponents, Chinese climate-related fiction novels experienced a resurgence in the 1990s, ushering in the "Revival Period" from 1991 to 2000. During this period, new works emerged continuously, different from the previous three periods where there were many restrictions. Science fiction literature entered commercialization earlier in this period, with a variety of science fiction novels of different genres flourishing, and science fiction magazines sprouting up like mushrooms after rain. In 1991, the *Science Fiction World* magazine successfully hosted the World Science Fiction Association (WSF) annual conference in Chengdu, which received enthusiastic responses, making *Science Fiction World* the main platform for science fiction

literature. At the peak of this stage, the combined sales of science fiction magazines in China were as high as 3.8 million, even higher than the combination of those in the UK, France, and Japan at the same time. During this period, many interesting climate novels emerged, such as Yang Jianguo's *Winter in the Arctic* (1993) and Yuan Yingpei's *Noah's Ark* (1993). The former describes the collapse of coastal cities due to global warming, prompting humans to migrate to the polar regions for survival; the latter depicts the rising sea level and the absence of higher organisms in the biosphere, where the "New Columbus" spacecraft, initially launched as an exploratory attempt at light speed, returns to Earth and can only launch again into outer space to search for opportunities for migration, becoming a true "Noah's Ark". Novels at this stage are concerned with climatic catastrophes brought about by climate change.

From 2000 to 2010 was a period of vigorous development for Chinese science fiction novels, as well as climate fiction, known as the "New Development Period". The ten years starting from 2000 witnessed a large number of high-quality short stories discussing the climate crisis. The renowned Chinese science fiction writer Cixin Liu, starting from winning the "Galaxy Award" for Chinese science fiction in 1999, has been highly acclaimed. He personally focuses a lot on climate issues, proposing his own thoughts and solutions on how to address the climate crisis in works such as *The Wandering Earth* (2000), *Sun of China* (2000), *The Micro Era* (2001), *Yuanyuan's Bubbles* (2004), and *The Three-Body Problem* (2008). Other writers such as Haihong Zhao, Jia Chang, and Fengnian Wanxiang are also deeply concerned about the human psyche and existence in the aftermath of Climate catastrophe.

Since 2011, Chinese climate fiction has entered "Prosperity Period". Following Cixin Liu's *The Three-Body Problem*, which garnered acclaim for its complexity and richness by winning the Hugo Award, it sparked a reading frenzy and widespread attention nationwide. Additionally, the influx of capital from the film and television industry into the science fiction genre further propelled the development of climate fiction. During this period, unlike previous short stories published online or in magazines, climate fiction began

to be published in the form of novels. Representative works include Xingshi Liu's *Himalayan Fantasia* (2012), Jun Zheng's *Northwest Route* (2012), Shu Bao's *The Duet of Haze* (2014), Xi He's *Dooms Year* (2015), Grey Fox's *Solid Ocean* (2018), Ji Wu's *Lunar Summit* (2021), Hongwei Liu's *Climate Phantoms* (2023), among others. These stories feature innovative themes and bold concepts, greatly expanding the types of topics covered in climate fiction, including elements of Chinese history, commercial economy, social life, political negotiations, scientific research, and suspenseful reasoning.

It is worth noting that during the last two periods, climate fiction has gradually diverged from the mainstream of science fiction and begun to develop independently, closely tied to the of China's emphasis on ecological civilization construction. Since the new government took office in 2013, a series of new viewpoints and propositions on ecological civilization construction have been put forward, such as "Lucid waters and lush mountains are invaluable assets" (2005), "Harmonious coexistence between humanity and nature" (2012), "Mountains, rivers, forests, farmlands, lakes, and grasslands constitute a community of life" (2013), "A sound ecological environment is the most inclusive public welfare" (2013), and "The prosperity of civilization depends on the flourishing of ecology" (2018), continuously exploring the harmonious relationship between human and nature. These have greatly stimulated the independent development of climate fiction. What's more, the Chinese government's participation in the "United Nations Framework Convention on Climate Change", as well as its promotion of the "Paris Agreement" and the "Kyoto Protocol", has significantly fueled the creative enthusiasm of science fiction writers. These pivotal events have propelled the development of Chinese climate fiction and have become important materials in the literary creation that highlights China's sense of global responsibility. For instance, works such as Xi He's *Dooms Year* (2015) and Ji Wu's *Lunar Summit* (2021) exemplify this trend.

Roughly speaking, there are more than two scores of representative works of climate fiction in China to date, a considerable quantity. Additionally, apart from Cixin Liu's

novel series and Xiankui Wu's partial novel creation which has been translated into English, other Chinese climate fiction works have not yet been translated into other languages; however, translators are currently planning to undertake such translations. As a result, they have received scant attention from the critical community and are yet to be fully recognized. However, they still have prominently displayed a considerable amount of perspectives and characteristics that are distinctly Chinese. Therefore, it is imperative to analyze the characteristics, contributions, and limitations of Chinese climate fiction up to the present.

3. Characteristics and Contributions of Chinese Climate Fiction

Climate fiction often sets its backdrop against climate change or environmental concerns, delving into the relationship between humans and nature. Currently, the global environmental situation is critical. According to the comprehensive report "Climate Change 2023" released by the IPCC, the global temperature has already risen by 1.1°C, leading to unprecedented systemic changes worldwide. These changes include rising sea levels, frequent extreme weather events, and rapid melting of sea ice. Further temperature increases will exacerbate these changes. The most concerning aspect of the report is that adverse climate change has already resulted in extreme consequences. Approximately half of the global population is facing severe water shortages, and rising temperatures have intensified the spread of vector-borne diseases such as malaria, West Nile virus, and Lyme disease. Climate change has also hindered agricultural productivity growth in mid- to low-latitude regions. Since 1961, crop productivity growth rates in Africa have declined by one-third. Since 2008, extreme floods and storms have annually displaced over 20 million people. Under the current warming trend, the 9.5 billion people living in global arid regions will face a series of challenges including water stress, heatwaves, and desertification, with a 24% increase in the proportion of the population affected by floods globally. Furthermore, the World Wildlife Fund (WWF) released its biennial flagship report "Living Planet Report 2022" in 2022. The report highlights that wildlife populations

monitored, including mammals, birds, amphibians, reptiles, and fish, have declined by an average of 69% since 1970.

The various attentions and responses to environmental crises are particularly evident in the setting of the background. Similar to these frequent climate disasters, Chinese science fiction novels predominantly set their backgrounds in deserts, coastal areas, polar regions, and cities, covering topics from global warming, droughts, floods, air pollution, to rising sea levels and species extinction. For instance, Yang Zhang's *Wind of the Desert* (2000) and Jinkang Wang's *Desert Earthworm* (2007) are set in deserts, discussing desertification issues. Wei Wu's *The Most Resilient Species* (2007) depicts the submergence of well-known coastal cities like New York and London due to rising sea levels. Haihong Zhao's *Starry Sky of Nan Dao* (2017) describes a family's breakdown under the climate crisis, where a mother manages to move with her daughter to the "Pearl City" with better air quality. Zheng Jun's *Northwest Route* (2012) also discusses the melting of polar glaciers due to climate warming, leading to a sharp decline in the food and habitat of polar bears.

In contrast to the protagonists in Western climate fiction, who hail from diverse social strata, cultural backgrounds, and professional fields, more than half of the characters in Chinese climate fiction novels focus on intellectuals such as scientists, researchers, meteorologists, astronauts, and politicians. For example, Yang Jianguo's *Winter in the Arctic* (1993) depicts a group of the world's finest scientists gathering in Greenland to undertake the great mission of saving humanity, creating a "man-made climate regulator" that marks a historic conquest of nature. Liu Cixin's *Yuanyuan's Bubbles* (2004) portrays a protagonist named Yuan Yuan who, after growing up, becomes a successful entrepreneur, establishing a big company, and realizes her dream of blowing big bubbles, which indirectly inspires the solution to the drought of an inland city. Jian Xia's *Heat Island* (2011) describes an emotionally charged story that ends abruptly in a laboratory setting amidst climate change.

In addition to the portrayal of intellectuals, some works also speculate on post-civilization human societies. These post-civilization

humans are depicted in various forms, including ordinary individuals plagued or threatened by climate disasters, merchants or criminal syndicates seeking to profit from climate change, humans evolved through the influence of the glacial age, humans genetically engineered, or "synthetic humans" processed by machines and human flesh, with notable works including Yingpei Yuan's *Noah's Ark* (1993), Cixin Liu's *The Micro Era* (2001), Song Han's *Red Ocean* (2004), Fengnian Wanxiang's *Chronicles of The Post-Glacial Era* (2007), and Bo Jiang's *Eyi* (2007). It is worth noting that typically the former group (intellectuals) embodies optimistic, idealistic hero figures, while the latter group (post-civilized human) represents ordinary humans who are fragile, facing survival crises, confronting crises of faith, or experiencing a collapse of values, mostly overly facetious.

Apart from character portrayal, Chinese climate fiction also focuses on exposing social problems under the climate crisis of the Anthropocene. The author will then proceed to conduct an in-depth analysis of the viewpoints, aesthetic concepts, and creative philosophies of these novels by integrating typical works of climate fiction and critical perspectives.

Firstly, it focuses on the slow violence of hyper-objects to explore novel human-object relationships and showcases a global ecological stance in addressing global climate disasters, exemplified by Grey Fox's *Solid Ocean* (2018). Sharing a similar global geographical perspective as the Hugo Award-winning work *The Windup Girl* by Paolo Bacigalupi, Grey Fox conceives an extremely invasive parasitic organism that feeds on plastics, relies on organic matter for sustenance, and spreads rapidly all around the world. These bacteria can survive for over twenty years in the bodies of whales, infiltrating their muscle tissue and brains, forming a network-like structure. This highly infectious bacterium can also invade human bodies; in coastal areas, offspring born to residents frequently consuming water contaminated with plastics are often corroded by plastics, unable to survive. Grey Fox emphasizes that the series of tragedies is caused by human's unrestrained production and indiscriminate dumping of waste. He employs a thrilling narrative style and

imagination to evoke the invisible and delayed characteristics of climate crisis-induced slow violence, aligning with Timothy Morton's concept of "hyper-objects" as articulated in *The Ecological Thought*. Morton metaphorically asserts the persistence and significant impact of hyper-objects: "Hyper-objects won't rot within our lifetimes. They burn a hole not just in the earth but in your mind. [6] "Grey Fox's portrayal of plastics, parasites, and "Jian-mu" (a stronger artificial entity than a symbiote, used to dissolve plastics and naturally die after depleting the nutrient "plastics," causing minimal harm to human bodies and society) offers an interpretation of "hyper-objects." Additionally, Grey Fox underscores the active characteristics of such mutated parasites. The depiction of these hyper-objects occupies significant space in the novel, as they can invade human bodies, form networks with humans, coexist with humans, and are mutually affected. They have even transcended their passive constructed status to become active constructors of societal meaning [7]. They have agency. Grey Fox's exquisite interpretation of hyper-objects enables readers to reflect with a sense of dread on this peculiar substance between organic and inorganic matter even after finishing the reading experience. However, somewhat disappointingly, amidst the struggle between ecocentrism and anthropocentrism, and the torment of mixed emotions of pessimism and optimism, the author hastily leans towards anthropocentrism. He dispatches a doctoral student and his mentor from the laboratory to invent "Jian-mu" to defeat the "parasite", hastily concluding this precarious race between humans and "objects". This hasty and somewhat timid ending is perplexing, raising the question of whether humans truly have the capability to understand and control hyper-objects, warranting further exploration. Furthermore, the author's world ecological stance is remarkably pronounced; he traverses between the polar regions, oceans, Japan, and China while also not overlooking connections with countries like the United States, Pakistan, and South Korea, linking the globe together. This underscores his demonstration of the necessity for "holistic" strategies and a consciousness of a "a community with a shared future for mankind" proposed by

Chinese government required to address climate issues comprehensively.

Secondly, it demonstrates the writer's reflection on intergenerational justice regarding climate issues and the attempt of innovation in cli-fi writing, using Xingshi Liu's *Himalayan Fantasia* (2012) as an example. This aligns with the theme of intergenerational justice explored in Cormac McCarthy's *The Road* and Barbara Kingsolver's *Flight Behavior*, yet it demonstrates significant differences in creative philosophy. In crafting this novel, Liu employs an innovative approach akin to academic essay writing; thus, the novel is not a traditional science fiction speculative narrative but rather grounded in factual contexts. For instance, at the outset, Liu outlines the entire plot of the story. He introduces that the novel sets against the backdrop of the late Quaternary ice age, and the protagonists, geologist Mengxiong Lu and historian Zhong'an Cao, traverse a temporal passageway to investigate the Great Drought in western China and global warming. In the preface, the author raises issues of tectonic movement, mentioning the northward thrust of the Indian plate against the Xizang plate, resulting in the disappearance of the ancient Mediterranean Sea, the emergence of the Himalayan Mountain Range, and the obstruction of warm, moist airflow from the Indian Ocean into western China, leading to extensive desertification. The author considers various solutions, from developing underground water to diverting the Yarlung Tsangpo River to western China, ultimately envisioning piercing through the Himalayan barrier to introduce Indian Ocean air masses. At this point, the main storyline of the story has been expounded; in other words, the "abstract" section of the paper has been outlined. The subsequent narrative unfolds like an expanded argumentation, as the author splits themselves into Mengxiong Lu and Zhong'an Cao, traversing time and space to investigate locations such as Loulan around 4000 BCE, Juyan Lake in 121 BCE, the Qilian Mountains in 2200 CE, and the Meghalaya state in 2701 CE. They discover that over time, desertification near the Hexi Corridor worsens, culminating in Mengxiong Lu receiving an email from his nth-generation grandson Xiaoxiong Lu, condemning Mengxiong's generation for disregarding future generations'

safety, failing to understand the importance of forest conservation and environmental protection, leading to the astonishing historical transformation of the Hexi Corridor into the “Hexi Desert”. After conducting their investigations, the protagonists resolve to penetrate the mountain barrier and even send a survey letter to descendants a thousand, two thousand, and three thousand years into the future to verify the experimental results, receiving flawless responses.

It is worth noting that the vast majority of descriptions in this novel are historically verifiable. Apart from a Loulan stone inscription, all materials in this novel are non-fictional, with references to 41 classical Chinese texts such as *Records of the Grand Historian of China*, *Records of the Western Regions of the Great Tang Dynasty*, *Romance of the Three Kingdoms*, and *Waterways Commentary*. The protagonist Zhong'an Cao's name also has significance, as Zhong'an Cao was a deceased friend of the author Xingshi Liu, a renowned Chinese archaeologist and one of the pioneers of Chinese science fiction. In tribute to his friend, Xingshi Liu chose his friend's name as the protagonist, coincidentally mirroring Xingshi Liu's own profession as a Chinese geological professor, aligning with the protagonist geologist Mengxiong Lu. From the perspective of literary genre, this novel appears highly unsuitable as a climate science fiction work. Speculative elements are minimal, plot developments are almost predictable, characterizations are flat, if not entirely absent, and science fiction settings lack scientific support, with the narrative progression stiff and chapter arrangements uniform, resembling the episodic structure of Chinese novels from the Ming and Qing dynasties. However, this independent approach is intentional on the author's part. Despite being considered one of the pioneers of Chinese science fiction, Liu is keenly aware of his creative direction, as stated in the preface: “This may not resemble ‘authentic’ science fiction, more akin to narrative-style popular science articles, an odd mix of ‘thesis’. Yet, what defines ‘authenticity’? Who dictates how science fiction should appear, unable to tolerate any deviation! “Hard science fiction” must be “hard to the core”, why not?” [8] This urgent and sincere attitude towards climate issues,

combined with an uninhibited approach to novel writing, sets this novel apart. However, such deviations are not common in Chinese science fiction writing, aside from this work; no similar creations were found in the author's research. When discussing the original intention behind this article, Liu writes in the preface, “This is not a leisurely work for amusement. It is a cautionary tale. My writing is not good, not very enjoyable to read; however, the situation is very serious, not fun at all.” (ibid.) This innovation is inextricably linked to the spirit of “daring to be the first in the world”, advocated during China's reform and opening-up period. Nevertheless, this novel is imbued throughout with a sense of technological optimism. Liu's portrayal of effortlessly obtaining answers and the optimistic ending significantly diminishes people's sense of urgency regarding climate issues, although this may contradict Liu's original intentions.

Thirdly, in the context of the climate crisis, particularly in the discourse surrounding great power competition such as the China-US relationship, works such as Xi He's *Dooms Year* (2015), Ji Wu's *Moon Summit* (2021), and Weiqiang Liu's *Climate Phantom* (2023) serve as exemplars, which showcases great differences from western climate fictions. In Western climate fiction, narratives explicitly framed against the backdrop of Sino-American conflict are relatively rare; instead, the genre predominantly concentrates on the effects of climate change on societal structures and the potential fragmentation of territories and nations due to resource contention exacerbated by climate change. Nonetheless, the theme of Sino-American relations in the context of climate solution efforts is one that resonates significantly with Chinese authors. *Dooms Year*, as He Xi's debut long-form hard science fiction novel, was awarded the highest honor in the Chinese science fiction community, the “Galaxy Award”. This novel, centered around the discovery of “Dooms Year” by climate researcher Zhexin Jiang, showcases the military-political maneuvers of reconnaissance and counter-reconnaissance between China and the United States. It also criticizes the passive attitude and slow action of the United States towards the climate crisis while actively engaging in intelligence reconnaissance in China. Furthermore, the novel contains

numerous metaphors, such as the frequent appearance of the “iron house”, implying how the inherent flaws of nations and individuals obstruct the dissemination of climate crisis truths and response measures. It suggests that communication between enlighteners and the enlightened is perpetually unattainable, leading to a tragic outcome, yet it praises those who persist in idealistic pursuits despite knowing the futility.

Additionally, Ji Wu’s *Moon Summit* (2021) provides a profound analysis of climate issues from an international political perspective for the first time. He identifies capitalism as the fundamental cause of the climate crisis. Set against the backdrop of 2068, the novel reveals the core propositions of global climate issues in political contention, emphasizing the severe inequality between developed and developing countries in climate resources and risk management. Through the portrayal of environmentalists, the novel depicts the excessive consumption of energy by the affluent class in the United States and its impact on global climate change. It also critiques regional inequalities and intra-national injustices in the climate context, as well as the deflection of responsibility by the United States and the weakness of its electoral system, highlighting the inherent contradictions of capitalist society and its inability to fundamentally address climate issues.

Furthermore, Weiqiang Liu’s *Climate Phantom* (2023) directly addresses climate and environmental issues in the United States, which begins with the mysterious suicide of a climate scientist on the Antarctic ice sheet, and ends with the revealing of America’s inaction on climate issues. The story revolves around Chinese climate scientist Hangyun Chu and Chinese-American documentary filmmaker Feiyang Shen, who becomes involved in a series of thrilling confrontations with American politicians and green energy groups while filming the “Climate Witnesses” documentary series. Together, they uncover a transnational conspiracy exploiting climate change for profit. Ultimately, they fulfill the dying wish of the late climate scientist, Mr. Doug, by showcasing the achievements of Chinese climate scientists at the United Nations Climate Summit, imbuing the narrative with a patriotic undertone.

These three novels collectively reveal the fundamental mechanism of the climate crisis rooted in the capitalist system and its modes of production and relations. Through profound exploration in this aspect, they effectively supplement the insufficient exploration of climate issues by Chinese science fiction writers, while also carrying a patriotic theme.

Fourthly, in addition to exploring grand narratives, some works also focus on the lives of ordinary individuals, such as Haihong Zhao’s *Cloud Messenger* (2004) and *Starry Sky of the Southern Island* (2017), Fengnian WanXiang’s *Chronicles of the Post-Glacial Era* (2007) and Shu Bao’s *Duet of Haze* (2014), which aligns with the themes commonly addressed in Western climate fiction. *Cloud Messenger* revolves around the protagonist’s journey to find his father, intertwining discussions of climate issues and technological rationality with themes of father-son and gender relationships, criticizing the mindset of technological optimism. The author, in making this arrangement, expresses her concerns, questioning whether, at the current level, such technology and plans can truly be a panacea to ensure the perpetual stability of Earth’s climate. The son and father represent two sides of thought: one embracing new technology, embodying technological optimism, while the other, influenced by traditional Chinese thought, instinctively believes in the balance of nature and warns against the potential disasters of human interference. The issue of stance may not be easily measured in terms of right or wrong, but the conclusion, where the son and father perish together in an airplane, suggests the author’s inclination towards a technologically pessimistic view, asserting that fate cannot be defied.

Fengnian Wanxiang’s *Chronicles of the Post-Glacial Era* (2007) intricately depicts the forms, values, and fate of human survival in the post-glacial era civilization, suggesting that even in this era, humanity still grapples with issues such as capitalist exploitation, racism, sexism, and class inequality. The novel emphasizes the inherent malice in human nature and explores issues of biopolitics. It portrays a society where the ruling class of new breeds enacts the “New Civilization Act”, allowing limited access for the original humans into society only after strict scrutiny.

Due to energy shortages, the state constructs numerous monkey power plants, leading to the review and eventual assignment of individuals—both animals and unemployed or unproductive citizens—to these facilities, where original humans are easily sent, condemned to work until death. By delineating a hierarchical society with a caste system, the novel exposes the political exclusivity and lays bare the existence of vulnerable lives outside the scrutiny system. Despite societal transformations, the ruling class's cruel oppression of the lower class remains constant. Through the tragic love story of the new breed Tan and the original human Fengyan, and the failure of geologist Laomu's generator invention, the author laments the absence of warmth in the chilling world, where survival reigns supreme, and underscores the tragic fate of humanity amidst the unstoppable currents of time.

Duet of Haze (2014) and *Starry Sky of the Southern Island* (2017) focus on individual perspectives to reflect on the wealth disparity and environmental justice amidst climate change. *Duet of Haze* portrays a dystopian society where the narrator, affluent and economically powerful, can eliminate haze-induced disruptions to the world's appearance through enhanced technology, depicting an irreversible, morally decadent, and collapsing society. The privileged narrator, observing the world with mocking indifference while being part of it, highlights the contrast between their life and that of ordinary people, intensifying the theme of unfair environmental resource distribution among different social strata. The depiction of the toxic haze, a mix of car exhaust, industrial smoke, various pollutants, and dust from land desertification, is striking. Citizens must apply anti-haze oil before going out, or risk appearing more corroded than weathered copper statues. In this gloomy and toxic environment, real plants cannot survive, with roads lined only with artificial flowers, while genuine ones are rare and encased in sealed glass. The yellowish haze obscures vision, allowing couples to boldly engage in public intimacy. In contrast, Haihong Zhao, the author of *Starry Sky of the Southern Island*, retains a sliver of trust and warmth towards human nature while depicting a story set against the backdrop of haze. The degradation of air quality in this novel divides

the city of "Ping'an City" into two parts: an inner area dominated by "Pearl City", covered by a pearl membrane, which constantly undergoes self-cleaning and enjoys higher air quality, and an outer area with perennially poor air quality where the sun is rarely visible during the day. In order for their child to breathe clean air, the protagonist's family is forced to separate, with the mother struggling for years to bring her daughter to live in Pearl City while the father, an idealistic stargazer, unwilling to abandon his research, remains outside the city, occasionally meeting his daughter. This novel portrays the fates of different characters under the backdrop of crisis, including a mother compromising with reality and struggling for her daughter, a father who refuses to give up pure idealism and actively chooses to forgo opportunities to enter the city, and a daughter who is powerless to choose and must endure the upheavals of life.

It is worth noting that despite both depicting haze, the attitudes of these two works are quite different, which is closely related to the time of their creation. According to statistics, in 2013, China experienced an average of 36 hazy days, the highest since 1961. In January alone, there were four large-scale haze weather events affecting 30 provinces, municipalities, and autonomous regions across the country, with unprecedented range, duration, and intensity. Also in the same year, the International Agency for Research on Cancer, a subsidiary of the World Health Organization, released a report identifying atmospheric pollution as a universal and major environmental carcinogen for the first time. "Haze" became the most widely discussed buzzword among the Chinese people in 2013. This background had a clear impact on the writing of *Duet of Haze* by Baoshu in 2014. However, with the completion of environmental governance by the state, the climate issues faced by *Starry Sky of the Southern Island*, finished in 2017, have improved significantly, resulting in a situation where the former portrays a grim haze while the latter depicts a warm one.

In summary, Chinese climate fiction has played a significant role in reflecting social realities and raising public awareness about climate issues in its country. Firstly, these climate novels display Chinese writers' concern for the climate crisis and adopt an

optimistic stance in addressing this challenge. The majority of the aforementioned Chinese climate novels reflect the serious yet optimistic stance of Chinese writers towards climate issues, an attitude that is conducive to inspiring positive aspirations in people to address climate problems and to actively engage in action. Secondly, the expansion of technological rationality, the prevalence of consumerism, the exposure of greedy human nature, and the capitalist system under the guise of the climate crisis in the human world reflect Chinese climate novelists' exploration and judgment of the root causes of climate issues. This surpasses the utilitarianism of climate change beyond the scope of popular science and technological innovation, leading to contemplation of the fundamental issues of human existence. Thirdly, the portrayal of the limitations brought by technological and scientific development in the face of the climate crisis, as well as the role played by social structures and human behavior in exacerbating climate issues, conveys Chinese science fiction writers' skepticism towards relying solely on technological solutions and suggests that addressing climate issues requires broader social change and a shift in values. Similarly, the exposure of consumerism and greedy human nature indicates that the root of the climate problem lies not only at the technological level but also at a deeper level involving human excessive pursuit of resources and irresponsible attitudes towards the environment. Ultimately, the exposure of the capitalist system reflects concerns about the direct or indirect impact of economic structures on the climate crisis, calling for a rethink and change in economic models and modes of production.

4. The Limitations of Chinese Climate Fiction

Although the creation of Chinese climate fiction has introduced a distinctive Chinese perspective to the global literary landscape, it still reveals its inherent flaws and limitations, primarily in the following five aspects:

Firstly, these climate novels still suffer from a lack of depth. The authors attempt to depict technological advancement as a potential savior for humanity's fate, expressing a belief that technological progress can improve human life. Yet, this idealistic tone is precisely

the limitation of Chinese climate fiction. Most works focus on the hope brought by technological solutions, neglecting a thorough exploration of the background and mechanisms of the climate crisis, as well as a deep dive into human nature. This singular thematic focus results in a lack of a comprehensive and profound understanding and expression of climate issues.

Secondly, the subject matter of these works is too singular, often lacking in depth and diversity. The narrative techniques are monotonous, and character portrayals tend to be stereotypical, lacking vibrant personalities and emotions. This weakens the emotional resonance and identification between readers and the works. Moreover, some works are overly utilitarian, excessively emphasizing the utility of technology while neglecting the exploration of human nature, social structures, and cultural concepts.

Thirdly, there is currently a theoretical insufficiency in the content structure of Chinese climate fiction. Although many climate novels focus on climate issues, they lack depth in scientific theory. The works tend to prioritize plot and storytelling over in-depth analysis of the scientific background, causes, and impacts of climate change. This restricts readers' comprehensive understanding of climate issues, and there is a noticeable lag in the availability of high-caliber hard science fiction works.

Fourthly, the literary expression techniques are relatively uniform. In terms of expression, some climate novels tend to employ similar literary methods, leading to little differentiation among works and a homogeneous reading experience that fails to satisfy experienced literary readers. There is a need for more innovation and experimentation, not just in plot but also in literary language and structure, to bring greater vitality to the development of climate fiction.

Lastly, the political perspective is relatively uniform. Climate novelists tend to have a singular inclination in their political viewpoints on climate issues, with a certain lack of full representation of different political systems and perspectives. A more diversified and balanced political viewpoint could help broaden readers' understanding of climate issues.

In summary, although Chinese climate fiction

has shown some positive engagement with climate issues, more effort is needed to address the aforementioned shortcomings to enhance the depth, breadth, and impact of the works. Chinese climate fiction has entered the “New Development” era, with writers of diverse educational backgrounds, social statuses, and cultural identities participating in the creation of science fiction, leading to the emergence of a new generation of authors with distinct styles and unique perspectives. These authors explore the potentialities and challenges of the human future from different angles, hoping that through continuous experimentation and exploration, Chinese climate fiction will gradually mature and make a greater contribution to the understanding and awareness of climate change issues. Meanwhile, the concept of “a community with a shared future for humanity” reflected in climate fiction not only demonstrates the authors’ profound concern for reality but also mirrors China’s awakening to global climate governance and ecological responsibility. As China increasingly takes center stage on the world stage, this awakening has prompted the nation to adopt a more proactive stance on global issues, committed to working together with the international community to address climate change and jointly safeguard our planetary home.

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References

- [1]. Rebecca Tuhus-Dubrow, “Cli-Fi: Birth of a Genre”. *Dissent*, 2013, 60, 58-61.
- [2]. Angela Evancie, “So Hot Right Now: Has Climate Change Created a New Literary Genre?”. *Weekend Edition Saturday*, 20 Apr, 2013.
- [3]. Yuting Zhu, “On the Creation of Science Fiction about Climate Change in China since the 1990s”. *Journal of Zhejiang University (Humanities and Social Sciences Edition)*, 2022, 52(12): 141-151.
- [4]. Guangyi Li, “Introduction of *A Collection of the Creation of Late Qing Volumes of Chinese Science Fiction Literature: Lunar Colony Novels*”. Chongqing: Chongqing University Press, 2020.
- [5]. Jianheng Xiao, On the Development of Science Fantasy Novels in China—and on Some Controversies in Science Fantasy Novels in China. *Science and Literature*, no. 4, 1980.
- [6]. Timothy Morton, *The Ecological Thought*. Cambridge: Harvard University Press, 2010.
- [7]. Elaine Freedgood, *The Ideas in Things: Fugitive Meaning in the Victorian Novel*. University of Chicago Press, 2006.
- [8]. Xingshi Liu, *Himalayan Fantasies: Knock on the Door in the New Catastrophe Era: A Generational Preface*. Beijing: Publishing House of Electronics Industry, 2012.