

THE BESTSELLING CLASSIC OF MODERN CHINESE SCIENCE FICTION,
AVAILABLE IN ENGLISH FOR THE FIRST TIME

THE THREE-BODY PROBLEM

Multiple winner of the Chinese Nebula and Galaxy Awards CIXIN LIU

Translated by KEN LIU *Winner of the Hugo, Nebula, and World Fantasy Awards*



THE
THREE-BODY
PROBLEM

Cixin Liu

TRANSLATED BY
Ken Liu



A TOM DOHERTY
ASSOCIATES BOOK
NEW YORK

The author and publisher have provided this e-book to you without Digital Rights Management software (DRM) applied so that you can enjoy reading it on your personal devices. This e-book is for your personal use only. You may not print or post this e-book, or make this e-book publicly available in any way. You may not copy, reproduce, or upload this e-book, other than to read it on one of your personal devices.

Copyright infringement is against the law. If you believe the copy of this e-book you are reading infringes on the author's copyright, please notify the publisher at: us.macmillanusa.com/piracy

LIST OF CHARACTERS

Chinese names are written with surname first.

The Ye Family

Ye Zhetai	Physicist, professor at Tsinghua University
Shao Lin	Physicist, Ye Zhetai's wife
Ye Wenjie	Astrophysicist, daughter of Ye Zhetai
Ye Wenxue	Ye Wenjie's sister, a Red Guard

Red Coast Base

Lei Zhicheng	Political commissar at Red Coast Base
Yang Weining	Chief engineer at Red Coast Base, once a student of Ye Zhetai

The Present

Yang Dong	String theorist and daughter of Ye Wenjie and Yang Weining
Ding Yi	Theoretical physicist, Yang Dong's boyfriend
Wang Miao	Nanomaterials researcher
Shi Qiang	Police detective, nicknamed Da Shi
Chang Weisi	Major-general of the People's Liberation Army
Shen Yufei	Japanese physicist and member of the Frontiers of Science
Wei Cheng	Math prodigy and recluse, Shen Yufei's husband
Pan Han	Biologist, friend/acquaintance of Shen Yufei and Wei Cheng, and member of the Frontiers of Science
Sha Ruishan	Astronomer, one of Ye Wenjie's students
Mike Evans	Scion of an oil magnate
Colonel Stanton	U.S. Marine Corps, commander of Operation Guzheng

CONTENTS

Title Page

Copyright Notice

List of Characters

Part I: Silent Spring

1. The Madness Years

2. Silent Spring

3. Red Coast I

Part II: Three Body

4. The Frontiers of Science

5. A Game of Pool

6. The Shooter and the Farmer

7. *Three Body*: King Wen of Zhou and the Long Night

8. Ye Wenjie

9. The Universe Flickers

10. Da Shi

11. *Three Body*: Mozi and Fiery Flames

12. Red Coast II

13. Red Coast III

14. Red Coast IV

15. *Three Body*: Copernicus, Universal Football, and Tri-Solar Day

16. The Three-Body Problem

17. *Three Body*: Newton, Von Neumann, the First Emperor, and Tri-Solar Syzygy

18. Meet-up

19. *Three Body*: Einstein, the Pendulum Monument, and the Great Rip

20. *Three Body*: Expedition

Part III: Sunset for Humanity

21. Rebels of Earth

22. Red Coast V

23. Red Coast VI

24. Rebellion

25. The Deaths of Lei Zhicheng and Yang Weining

26. No One Repents

28. The Second Red Coast Base
29. The Earth-Trisolaris Movement
30. Two Protons
31. Operation Guzheng
32. Trisolaris: The Listener
33. Trisolaris: Sophon
34. Bugs
35. The Ruins

Author's Postscript for the American Edition

Translator's Postscript

About the Author

About the Translator

Copyright

PART I

SILENT SPRING

The Madness Years

China, 1967

The Red Union had been attacking the headquarters of the April Twenty-eighth Brigade for two days. Their red flags fluttered restlessly around the brigade building like flames yearning for firewood.

The Red Union commander was anxious, though not because of the defenders he faced. The more than two hundred Red Guards of the April Twenty-eighth Brigade were mere greenhorns compared with the veteran Red Guards of the Red Union, which was formed at the start of the Great Proletarian Cultural Revolution in early 1966. The Red Union had been tempered by the tumultuous experience of revolutionary tours around the country and seeing Chairman Mao in the great rallies in Tiananmen Square.

But the commander *was* afraid of the dozen or so iron stoves inside the building, filled with explosives and connected to each other by electric detonators. He couldn't see them, but he could feel their presence like iron sensing the pull of a nearby magnet. If a defender flipped the switch, revolutionaries and counter-revolutionaries alike would all die in one giant ball of fire.

And the young Red Guards of the April Twenty-eighth Brigade were indeed capable of such madness. Compared with the weathered men and women of the first generation of Red Guards, the new rebels were a pack of wolves on hot coals, crazier than crazy.

The slender figure of a beautiful young girl emerged at the top of the building, waving the giant red banner of the April Twenty-eighth Brigade. Her appearance was greeted immediately by a cacophony of gunshots. The weapons attacking her were a diverse mix: antiques such as American carbines, Czech-style machine guns, Japanese Type-38 rifles; newer weapons such as standard-issue People's Liberation Army rifles and submachine guns, stolen from the PLA after the publication of the "August Editorial"¹; and even a few Chinese *dadao* swords and spears. Together, they formed a condensed version of modern history.

Numerous members of the April Twenty-eighth Brigade had engaged in similar displays before. They'd stand on top of the building, wave a flag, shout slogans through megaphones, and scatter flyers at the attackers below. Every time, the courageous man or woman had been able to retreat safely from the hailstorm of bullets and earn glory for their valor.

The new girl clearly thought she'd be just as lucky. She waved the battle banner as though brandishing her burning youth, trusting that the enemy would be burnt to ashes in the revolutionary flames, imagining that an ideal world would be born tomorrow from the ardor and zeal coursing

through her blood.... She was intoxicated by her brilliant, crimson dream until a bullet pierced her chest.

Her fifteen-year-old body was so soft that the bullet hardly slowed down as it passed through it and whistled in the air behind her. The young Red Guard tumbled down along with her flag, her light form descending even more slowly than the piece of red fabric, like a little bird unwilling to leave the sky.

The Red Union warriors shouted in joy. A few rushed to the foot of the building, tore away the battle banner of the April Twenty-eighth Brigade, and seized the slender, lifeless body. They raised their trophy overhead and flaunted it for a while before tossing it toward the top of the metal gate of the compound.

Most of the gate's metal bars, capped with sharp tips, had been pulled down at the beginning of the factional civil wars to be used as spears, but two still remained. As their sharp tips caught the girl, lightning seemed to return momentarily to her body.

The Red Guards backed up some distance and began to use the impaled body for target practice. For her, the dense storm of bullets was now no different from a gentle rain, as she could no longer feel anything. From time to time, her vinelike arms jerked across her body softly, as though she were flicking off drops of rain.

And then half of her young head was blown away, and only a single, beautiful eye remained to stare at the blue sky of 1967. There was no pain in that gaze, only solidified devotion and yearning.

And yet, compared to some others, she was fortunate. At least she died in the throes of passionately sacrificing herself for an ideal.

* * *

Battles like this one raged across Beijing like a multitude of CPUs working in parallel, their combined output, the Cultural Revolution. A flood of madness drowned the city and seeped into every nook and cranny.

At the edge of the city, on the exercise grounds of Tsinghua University, a mass "struggle session" attended by thousands had been going on for nearly two hours. This was a public rally intended to humiliate and break down the enemies of the revolution through verbal and physical abuse until they confessed to their crimes before the crowd.

As the revolutionaries had splintered into numerous factions, opposing forces everywhere engaged in complex maneuvers and contests. Within the university, intense conflicts erupted between the Red Guards, the Cultural Revolution Working Group, the Workers' Propaganda Team, and the Military Propaganda Team. And each faction divided into new rebel groups from time to time, each based on different backgrounds and agendas, leading to even more ruthless fighting.

But for *this* mass struggle session, the victims were the reactionary bourgeois academic authorities. These were the enemies of every faction, and they had no choice but to endure cruel attacks from every side.

Compared to other "Monsters and Demons,"² reactionary academic authorities were special

During the earliest struggle sessions, they had been both arrogant and stubborn. That was also the stage in which they had died in the largest numbers. Over a period of forty days, in Beijing alone more than seventeen hundred victims of struggle sessions were beaten to death. Many others picked an easier path to avoid the madness: Lao She, Wu Han, Jian Bozan, Fu Lei, Zhao Jiuzhang, Yi Qun, Wei Jie, Hai Mo, and other once-respected intellectuals had all chosen to end their lives.³

Those who survived that initial period gradually became numb as the ruthless struggle sessions continued. The protective mental shell helped them avoid total breakdown. They often seemed to be half asleep during the sessions and would only startle awake when someone screamed in their faces or made them mechanically recite their confessions, already repeated countless times.

Then, some of them entered a third stage. The constant, unceasing struggle sessions injected vivid political images into their consciousness like mercury, until their minds, erected upon knowledge and rationality, collapsed under the assault. They began to really believe that they were guilty, to see how they had harmed the great cause of the revolution. They cried, and their repentance was far deeper and more sincere than that of those Monsters and Demons who were not intellectuals.

For the Red Guards, heaping abuse upon victims in those two latter mental stages was utterly boring. Only those Monsters and Demons who were still in the initial stage could give the overstimulated brains the thrill they craved, like the red cape of the matador. But such desirable victims had grown scarce. In Tsinghua there was probably only one left. Because he was so rare, he was reserved for the very end of the struggle session.

Ye Zhetai had survived the Cultural Revolution so far, but he remained in the first mental stage. He refused to repent, to kill himself, or to become numb. When this physics professor walked onto the stage in front of the crowd, his expression clearly said: *Let the cross I bear be even heavier.*

The Red Guards did indeed have him carry a burden, but it wasn't a cross. Other victims wore tall hats made from bamboo frames, but his was welded from thick steel bars. And the plaque he wore around his neck wasn't wooden, like the others, but an iron door taken from a laboratory oven. His name was written on the door in striking black characters, and two red diagonals were drawn across them in a large X.

Twice the number of Red Guards used for other victims escorted Ye onto the stage: two men and four women. The two young men strode with confidence and purpose, the very image of mature Bolshevik youths. They were both fourth-year students⁴ majoring in theoretical physics, and Ye was their professor. The women, really girls, were much younger, second-year students from the junior high school attached to the university.⁵ Dressed in military uniforms and equipped with bandoliers, they exuded youthful vigor and surrounded Ye Zhetai like four green flames.

His appearance excited the crowd. The shouting of slogans, which had slackened a bit, now picked up with renewed force and drowned out everything else like a resurgent tide.

After waiting patiently for the noise to subside, one of the male Red Guards turned to the victim. "Ye Zhetai, you are an expert in mechanics. You should see how strong the great unified force you're resisting is. To remain so stubborn will lead only to your death! Today, we will continue the agenda

from the last time. There's no need to waste words. Answer the following question without your typical deceit: Between the years of 1962 and 1965, did you not decide on your own to add relativity to the intro physics course?"

"Relativity is part of the fundamental theories of physics," Ye answered. "How can a basic survey course not teach it?"

"You lie!" a female Red Guard by his side shouted. "Einstein is a reactionary academic authority. He would serve any master who dangled money in front of him. He even went to the Americas, Imperialists and helped them build the atom bomb! To develop a revolutionary science, we must overthrow the black banner of capitalism represented by the theory of relativity!"

Ye remained silent. Enduring the pain brought by the heavy iron hat and the iron plaque hanging from his neck, he had no energy to answer questions that were not worth answering. Behind him, one of his students also frowned. The girl who had spoken was the most intelligent of the four female Red Guards, and she was clearly prepared, as she had been seen memorizing the struggle session script before coming onstage.

But against someone like Ye Zhetai, a few slogans like that were insufficient. The Red Guards decided to bring out the new weapon they had prepared against their teacher. One of them waved someone offstage. Ye's wife, physics professor Shao Lin, stood up from the crowd's front row. She walked onto the stage dressed in an ill-fitting green outfit, clearly intended to imitate the military uniform of the Red Guards. Those who knew her remembered that she had often taught class in an elegant *qipao*, and her current appearance felt forced and awkward.

"Ye Zhetai!" She was clearly unused to such theater, and though she tried to make her voice louder, the effort magnified the tremors in it. "You didn't think I would stand up and expose you? Criticize you? Yes, in the past, I was fooled by you. You covered my eyes with your reactionary view of the world and science! But now I am awake and alert. With the help of the revolutionary youths, I want to stand on the side of the revolution, the side of the people!"

She turned to face the crowd. "Comrades, revolutionary youths, revolutionary faculty and staff, you must clearly understand the reactionary nature of Einstein's theory of relativity. This is most apparent in general relativity: Its static model of the universe negates the dynamic nature of matter. It is anti-dialectical! It treats the universe as limited, which is absolutely a form of reactionary idealism...."

As he listened to his wife's lecture, Ye allowed himself a wry smile. *Lin, I fooled you? Indeed, my heart you've always been a mystery. One time, I praised your genius to your father—he's lucky to have died early and escaped this catastrophe—and he shook his head, telling me that he did not think you would ever achieve much academically. What he said next turned out to be so important to the second half of my life: "Lin Lin is too smart. To work in fundamental theory, one must be stupid."*

In later years, I began to understand his words more and more. Lin, you truly are too smart. Even a few years ago, you could feel the political winds shifting in academia and prepared yourself. For example, when you taught, you changed the names of many physical laws and constants: Ohm's law you called resistance law, Maxwell's equations you called electromagnetic equations, Planck's

constant you called the quantum constant.... You explained to your students that all scientific accomplishments resulted from the wisdom of the working masses, and those capitalist academic authorities only stole these fruits and put their names on them.

But even so, you couldn't be accepted by the revolutionary mainstream. Look at you now: You're not allowed to wear the red armband of the "revolutionary faculty and staff"; you had to come up here empty-handed, without the status to carry a Little Red Book.... You can't overcome the fault of being born to a prominent family in pre-revolutionary China and of having such famous scholars as parents.

But you actually have more to confess about Einstein than I do. In the winter of 1922, Einstein visited Shanghai. Because your father spoke fluent German, he was asked to accompany Einstein on his tour. You told me many times that your father went into physics because of Einstein's encouragement, and you chose physics because of your father's influence. So, in a way, Einstein can be said to have indirectly been your teacher. And you once felt so proud and lucky to have such a connection.

Later, I found out that your father had told you a white lie. He and Einstein had only one very brief conversation. The morning of November 13, 1922, he accompanied Einstein on a walk along Nanjing Road. Others who went on the walk included Yu Youren, president of Shanghai University, and Cao Gubing, general manager of the newspaper Ta Kung Pao. When they passed a maintenance site in the road bed, Einstein stopped next to a worker who was smashing stones and silently observed this boy with torn clothes and dirty face and hands. He asked your father how much the boy earned each day. After asking the boy, he told Einstein: five cents.

This was the only time he spoke with the great scientist who changed the world. There was no discussion of physics, of relativity, only cold, harsh reality. According to your father, Einstein stood there for a long time after hearing the answer, watching the boy's mechanical movements, not even bothering to smoke his pipe as the embers went out. After your father recounted this memory to me, he sighed and said, "In China, any idea that dared to take flight would only crash back to the ground. The gravity of reality is too strong."

"Lower your head!" one of the male Red Guards shouted. This may actually have been a gesture of mercy from his former student. All victims being struggled against were supposed to lower their heads. If Ye did lower his head, the tall, heavy iron hat would fall off, and if he kept his head lowered there would be no reason to put it back on him. But Ye refused and held his head high, supporting the heavy weight with his thin neck.

"Lower your head, you stubborn reactionary!" One of the girl Red Guards took off her belt and swung it at Ye. The copper belt buckle struck his forehead and left a clear impression that was quickly blurred by oozing blood. He swayed unsteadily for a few moments, then stood straight and firm again.

One of the male Red Guards said, "When you taught quantum mechanics, you also mixed in many reactionary ideas." Then he nodded at Shao Lin, indicating that she should continue.

Shao was happy to oblige. She had to keep on talking, otherwise her fragile mind, already hanging on only by a thin thread, would collapse completely. "Ye Zhetai, you cannot deny this charge! You

have often lectured students on the reactionary Copenhagen interpretation of quantum mechanics.”

“It is, after all, the explanation recognized to be most in line with experimental results.” His tone was so calm and collected, surprised and frightened Shao Lin.

“This explanation posits that external observation leads to the collapse of the quantum wave function. This is another expression of reactionary idealism, and it’s indeed the most brazen expression.”

“Should philosophy guide experiments, or should experiments guide philosophy?” Ye’s sudden counterattack shocked those leading the struggle session. For a moment they did not know what to do.

“Of course it should be the correct philosophy of Marxism that guides scientific experiments!” one of the male Red Guards finally said.

“Then that’s equivalent to saying that the correct philosophy falls out of the sky. This is again the idea that the truth emerges from experience. It’s counter to the principles of how Marxism seeks to understand nature.”

Shao Lin and the two college student Red Guards had no answer for this. Unlike the Red Guards who were still in junior high school, they couldn’t completely ignore logic.

But the four junior high girls had their own revolutionary methods that they believed were invincible. The girl who had hit Ye before took out her belt and whipped Ye again. The other three girls also took off their belts to strike at Ye. With their companion displaying such revolutionary fervor, they had to display even more, or at least the same amount. The two male Red Guards didn’t interfere. If they tried to intervene now, they would be suspected of being insufficiently revolutionary.

“You also taught the big bang theory. This is the most reactionary of all scientific theories.” One of the male Red Guards spoke up, trying to change the subject.

“Maybe in the future this theory will be disproven. But two great cosmological discoveries of the century—Hubble’s law, and observation of the cosmic microwave background—show that the big bang theory is currently the most plausible explanation for the origin of the universe.”

“Lies!” Shao Lin shouted. Then she began a long lecture about the big bang theory, remembering to splice in insightful critiques of the theory’s extremely reactionary nature. But the freshness of the theory attracted the most intelligent of the four girls, who couldn’t help but ask, “Time began with the singularity? So what was there before the singularity?”

“Nothing,” Ye said, the way he would answer a question from any curious young person. He turned to look at the girl kindly. With his injuries and the tall iron hat, the motion was very difficult.

“No ... nothing? That’s reactionary! Completely reactionary!” the frightened girl shouted. Shao Lin turned to Shao Lin, who gladly came to her aid.

“The theory leaves open a place to be filled by God.” Shao nodded at the girl.

The young Red Guard, confused by these new thoughts, finally found her footing. She raised her hand, still holding the belt, and pointed at Ye. “You: you’re trying to say that God exists?”

“I don’t know.”

“What?”

“I’m saying I don’t know. If by ‘God’ you mean some kind of superconsciousness outside the universe, I don’t know if it exists or not. Science has given no evidence either way.” Actually, in this nightmarish moment, Ye was leaning toward believing that God did not exist.

This extremely reactionary statement caused a commotion in the crowd. Led by one of the Red Guards on stage, another tide of slogan-shouting exploded.

“Down with reactionary academic authority Ye Zhetai!”

“Down with all reactionary academic authorities!”

“Down with all reactionary doctrines!”

Once the slogans died down, the girl shouted, “God does not exist. All religions are too concocted by the ruling class to paralyze the spirit of the people!”

“That is a very one-sided view,” Ye said calmly.

The young Red Guard, embarrassed and angry, reached the conclusion that, against this dangerous enemy, all talk was useless. She picked up her belt and rushed at Ye, and her three companions followed. Ye was tall, and the four fourteen-year-olds had to swing their belts upward to reach his head, still held high. After a few strikes, the tall iron hat, which had protected him a little, fell off. The continuing barrage of strikes by the metal buckles finally made him fall down.

The young Red Guards, encouraged by their success, became even more devoted to this glorious struggle. They were fighting for faith, for ideals. They were intoxicated by the bright light cast on them by history, proud of their own bravery....

Ye’s two students had finally had enough. “The chairman instructed us to ‘rely on eloquence rather than violence’!” They rushed over and pulled the four semicrazed girls off Ye.

But it was already too late. The physicist lay quietly on the ground, his eyes still open as blood oozed from his head. The frenzied crowd sank into silence. The only thing that moved was a thin stream of blood. Like a red snake, it slowly meandered across the stage, reached the edge, and dripped onto a chest below. The rhythmic sound made by the blood drops was like the steps of someone walking away.

A cackling laugh broke the silence. The sound came from Shao Lin, whose mind had finally broken. The laughter frightened the attendees, who began to leave the struggle session, first in trickle and then in a flood. The exercise grounds soon emptied, leaving only one young woman below the stage.

She was Ye Wenjie, Ye Zhetai’s daughter.

As the four girls were taking her father’s life, she had tried to rush onto the stage. But two other university janitors held her down and whispered into her ear that she would lose her own life if she went. The mass struggle session had turned into a scene of madness, and her appearance would only incite more violence. She had screamed and screamed, but she had been drowned out by the frenzied waves of slogans and cheers.

When it was finally quiet again, she was no longer capable of making any sound. She stared at her father’s lifeless body, and the thoughts she could not voice dissolved into her blood, where they would

stay with her for the rest of her life. After the crowd dispersed, she remained like a stone statue, her body and limbs in the positions they were in when the two old janitors had held her back.

After a long time, she finally let her arms down, walked slowly onto the stage, sat next to her father's body, and held one of his already-cold hands, her eyes staring emptily into the distance. When they finally came to carry away the body, she took something from her pocket and put it into her father's hand: his pipe.

Wenjie quietly left the exercise grounds, empty save for the trash left by the crowd, and headed home. When she reached the foot of the faculty housing apartment building, she heard peals of crazy laughter coming out of the second-floor window of her home. That was the woman she had once called her mother.

Wenjie turned around, not caring where her feet would carry her.

Finally, she found herself at the door of Professor Ruan Wen. Throughout the four years of Wenjie's college life, Professor Ruan had been her advisor and her closest friend. During the two years after that, when Wenjie had been a graduate student in the Astrophysics Department, and through the subsequent chaos of the Cultural Revolution, Professor Ruan remained her closest confidante, other than her father.

Ruan had studied at Cambridge University, and her home had once fascinated Wenjie: refined books, paintings, and records brought back from Europe; a piano; a set of European-style pipes arranged on a delicate wooden stand, some made from Mediterranean briar, some from Turkish meerschaum. Each of them seemed suffused with the wisdom of the man who had once held the bowl in his hand or clamped the stem between his teeth, deep in thought, though Ruan had never mentioned the man's name. The pipe that had belonged to Wenjie's father had in fact been a gift from Ruan.

This elegant, warm home had once been a safe harbor for Wenjie when she needed to escape the storms of the larger world, but that was before Ruan's home had been searched and her possessions seized by the Red Guards. Like Wenjie's father, Ruan had suffered greatly during the Cultural Revolution. During her struggle sessions, the Red Guards had hung a pair of high heels around her neck and streaked her face with lipstick to show how she had lived the corrupt lifestyle of a capitalist.

Wenjie pushed open the door to Ruan's home, and she saw that the chaos left by the Red Guards had been cleaned up: The torn oil paintings had been glued back together and rehung on the walls; the toppled piano had been set upright and wiped clean, though it was broken and could no longer be played; the few books left behind had been put back neatly on the shelf....

Ruan was sitting on the chair before her desk, her eyes closed. Wenjie stood next to Ruan and gently caressed her professor's forehead, face, and hands—all cold. Wenjie had noticed the empty sleeping pill bottle on the desk as soon as she came in.

She stood there for a while, silent. Then she turned and walked away. She could no longer feel grief. She was now like a Geiger counter that had been subjected to too much radiation, no longer capable of giving any reaction, noiselessly displaying a reading of zero.

But as she was about to leave Ruan's home, Wenjie turned around for a final look. She noticed the

Professor Ruan had put on makeup. She was wearing a light coat of lipstick and a pair of high heels.

Silent Spring

Two years later, the Greater Khingan Mountains

“Tim-ber...”

Following the loud chant, a large Dahurian larch, thick as the columns of the Parthenon, fell with a thump, and Ye Wenjie felt the earth quake.

She picked up her ax and saw and began to clear the branches from the trunk. Every time she did this, she felt as though she were cleaning the corpse of a giant. Sometimes she even imagined the giant was her father. The feelings from that terrible night two years ago when she cleaned her father's body in the mortuary would resurface, and the splits and cracks in the larch bark seemed to turn into the old scars and new wounds covering her father.

Over one hundred thousand people from the six divisions and forty-one regiments of the Inner Mongolia Production and Construction Corps were scattered among the vast forests and grasslands. When they first left the cities and arrived at this unfamiliar wilderness, many of the corps' "educated youths"—young college students who no longer had schools to go to—had cherished a romantic wish. When the tank clusters of the Soviet Revisionist Imperialists rolled over the Sino-Mongolian border, they would arm themselves and make their own bodies the first barrier in the Republic's defense. Indeed, this expectation was one of the strategic considerations motivating the creation of the Production and Construction Corps.

But the war they craved was like a mountain at the other end of the grassland: clearly visible, but as far away as a mirage. So they had to content themselves with clearing fields, grazing animals, and chopping down trees.

Soon, the young men and women who had once expended their youthful energy on tours to the holy sites of the Chinese Revolution discovered that, compared to the huge sky and open air of Inner Mongolia, the biggest cities in China's interior were nothing more than sheep pens. Stuck in the middle of the cold, endless expanse of forests and grasslands, their burning ardor was meaningless. Even if they spilled all of their blood, it would cool faster than a pile of cow dung, and not be useful. But burning was their fate; they were the generation meant to be consumed by fire. And so, under their chain saws, vast seas of forests turned into barren ridges and denuded hills. Under the tractors and combine harvesters, vast tracts of grasslands became grain fields, then deserts.

Ye Wenjie could only describe the deforestation that she witnessed as madness. The tall Dahurian larch, the evergreen Scots pine, the slim and straight white birch, the cloud-piercing Korean aspen, the

aromatic Siberian fir, along with black birch, oak, mountain elm, *Chosenia arbutifolia*—whatever they laid eyes on, they cut down. Her company wielded hundreds of chain saws like a swarm of steaming locusts, and after they passed, only stumps were left.

The fallen Dahurian larch, now bereft of branches, was ready to be taken away by tractor. Ye gently caressed the freshly exposed cross section of the felled trunk. She did this often, as though such surfaces were giant wounds, as though she could feel the tree's pain. Suddenly, she saw another hand lightly stroking the matching surface of the stump a few feet away. The tremors in that hand revealed a heart that resonated with hers. Though the hand was pale, she could tell it belonged to a man.

She looked up. It was Bai Mulin. A slender, delicate man who wore glasses, he was a reporter for the *Great Production News*, the corps' newspaper. He had arrived the day before yesterday to gather news about her company. Ye remembered reading his articles, which were written in a beautiful style sensitive and fine, ill suited to the rough-hewn environment.

"Ma Gang, come here," Bai called to a young man a little ways off. Ma was barrel-chested and muscular, like the Dahurian larch that he had just felled. He came over, and Bai asked him, "Do you know how old this tree was?"

"You can count the rings." Ma pointed to the stump.

"I did. More than three hundred and thirty years. Do you remember how long it took you to saw through it?"

"No more than ten minutes. Let me tell you, I'm the fastest chain saw operator in the company. Whichever squad I'm with, the red flag for model workers follows me." Ma Gang's excitement was typical of most people Bai paid attention to. To be featured in the *Great Production News* would be considerable honor.

"More than three hundred years! A dozen generations. When this tree was but a shrub, it was still in the Ming Dynasty. During all these years, can you imagine how many storms it had weathered, how many events it had witnessed? But in a few minutes you cut it down. You really felt nothing?"

"What do you want me to feel?" Ma Gang gave a blank look. "It's just a tree. The only things we don't lack around here are trees. There are plenty of other trees much older than this one."

"It's all right. Go back to work." Bai shook his head, sat down on the stump, and sighed.

Ma Gang shook his head as well, disappointed that the reporter wasn't interested in an interview. "Intellectuals always make a fuss about nothing," he muttered. As he spoke, he glanced at Ye Wenjie, apparently including her in his judgment.

The trunk was dragged away. Rocks and stumps in the ground broke the bark in more places, wounding the giant body further. In the spot where it once stood, the weight of the fallen tree being dragged left a deep channel in the layers of decomposing leaves that had accumulated over the years. Water quickly filled the ditch. The rotting leaves made the water appear crimson, like blood.

"Wenjie, come and take a rest." Bai pointed to the empty half of the stump on which he was sitting. Ye was indeed tired. She put down her tools, came over, and sat down with Bai, back to back.

After a long silence, Bai blurted out, "I can tell how you're feeling. The two of us are the only ones

who feel this way.”

Ye remained silent. Bai knew that she likely wouldn't answer. She was a woman of few words, and rarely conversed with anyone. Some new arrivals even mistook her for a mute.

Bai went on talking. “I visited this region a year ago. I remember arriving around noon, and my hosts told me that we'd have fish for lunch. I looked around the bark-lined hut and saw only a pot of water being boiled. No fish. Then, as soon as the water boiled, the cook went out with a rolling pin. He stood on the shore of the brook that passed before the hut, struck the water with the rolling pin a few times, and was able to drag a few big fish out of the water... What a fertile place! But now, if you go and look at that brook, it's just dead, muddy water in a ditch. I really don't know if the Corps is engaged in construction or destruction.”

“Where did you get thoughts like that?” Ye asked softly.

She did not express agreement or disagreement, but Bai was grateful that she had spoken at all. “I just read a book, and it really moved me. Can you read English?”

Ye nodded.

Bai took a book with a blue cover from his bag. He looked around to be sure no one was watching and handed it to her. “This was published in 1962 and was very influential in the West.”

Wenjie turned around on the stump to accept the book. *Silent Spring*, she read on the cover, by *Rachel Carson*. “Where did you get this?”

“The book attracted the attention of the higher-ups. They want to distribute it to select cadres⁶ for internal reference. I'm responsible for translating the part that has to do with forests.”

Wenjie opened the book and was pulled in. In a brief opening chapter, the author described a quiet town silently dying from the use of pesticides. Carson's deep concern suffused the simple, plain sentences.

“I want to write to the leadership in Beijing and let them know about the irresponsible behavior of the Construction Corps,” Bai said.

Ye looked up from the book. It took a while for her to process his words. She said nothing and turned her eyes back to the page.

“Keep it for now, if you want to read it. But best be careful and don't let anyone see it. You know what they think of this kind of book...” Bai got up, looked around carefully once again, and left.

* * *

More than four decades later, in her last moments, Ye Wenjie would recall the influence *Silent Spring* had on her life.

The book dealt only with a limited subject: the negative environmental effects of excessive pesticide use. But the perspective taken by the author shook Ye to the core. The use of pesticides had seemed to Ye just a normal, proper—or, at least, neutral—act, but Carson's book allowed Ye to see that, from Nature's perspective, their use was indistinguishable from the Cultural Revolution, and equally destructive to our world. If this was so, then how many other acts of humankind that had

seemed normal or even righteous were, in reality, evil?

As she continued to mull over these thoughts, a deduction made her shudder: *Is it possible that the relationship between humanity and evil is similar to the relationship between the ocean and a iceberg floating on its surface? Both the ocean and the iceberg are made of the same material. The iceberg seems separate is only because it is in a different form. In reality, it is but a part of the vast ocean....*

It was impossible to expect a moral awakening from humankind itself, just like it was impossible to expect humans to lift off the earth by pulling up on their own hair. To achieve moral awakening required a force outside the human race.

This thought determined the entire direction of Ye's life.

* * *

Four days after receiving the book, Ye went to the company's guesthouse, where Bai was living, to return the book. Ye opened the door and saw that Bai was lying on the bed, exhausted and covered by wood shavings and mud. When Bai saw Ye, he struggled to get up.

"Did you work today?" Ye asked.

"I've been here with the company for so long. I can't just walk around all day doing nothing. Have to participate in labor. That's the spirit of the revolution, right? Oh, I worked near Radar Peak. The trees there were so dense. I sank into the rotting leaves all the way up to my knees. I'm afraid I'll get sick from the miasma."

"Radar Peak?" Ye was shocked.

"Yes. The regiment had an emergency assignment: clear out a warning zone all around the peak by cutting down trees."

Radar Peak was a mysterious place. The steep, once-nameless peak got its moniker from the large parabolic antenna dish at the top. In reality, everyone with a little common sense knew it wasn't a radar antenna: Even though its orientation changed every day, the antenna never moved in a continuous manner. As the wind blew past it, the dish emitted a howl that could be heard from far away.

People in Ye's company knew only that Radar Peak was a military base. According to the locals, when the base was built three years ago, the military mobilized a lot of people to construct a road leading to the top and to string a power line along it. Tons of supplies were transported up the mountain. But after the completion of the base, the road was destroyed, leaving behind only a difficult trail that snaked between the trees. Often helicopters could be seen landing on and lifting off the peak.

The antenna wasn't always visible. When the wind was too strong, it was retracted.

But when it was extended, many strange things occurred around the area: Animals in the forest became noisy and anxious, flocks of birds erupted from the woods, and people suffered nausea and dizziness. Also, those who lived near Radar Peak tended to lose their hair. According to the locals, these phenomena only began after the antenna was built.

There were many strange stories associated with Radar Peak. One time, when it was snowing, the antenna was extended, and the snow instantly turned to rain. Since the temperature near ground was still below freezing, the rain turned to ice on the trees. Gigantic icicles hung from the trees, and the forest turned into a crystal palace. From time to time, branches cracked under the weight of the ice and the icicles crashed to the ground with loud thumps. Sometimes, when the antenna was extended, a clear day would turn to thunder and lightning, and strange lights would appear in the night sky.

After the arrival of the Construction Corps company, the commander told everyone right away to take care to avoid approaching the heavily guarded Radar Peak, because the patrols were allowed to shoot without warning.

Last week, two of the men had gone hunting and chased a deer to the foot of Radar Peak without realizing where they were, and the sentries stationed halfway up the peak shot at them. Luckily, the forest was so dense that the two escaped without injury, though one of the men peed in his pants. At the company meeting the next day, both men were reprimanded. Maybe it was because of this incident that the base had directed the Corps to create a warning zone in the forest around the peak. The fact that the base could issue labor assignments to the Construction Corps hinted at its political power.

Bai Mulin accepted the book from Ye and carefully hid it under his pillow. From the same place he retrieved a few sheets of paper filled with dense writing and handed them to her. "This is a draft of my letter. Would you read it?"

"Letter?"

"Like I was telling you, I want to write to the central leadership in Beijing."

The handwriting was very sloppy, and Ye had to read it slowly. But the content was informative and tightly argued. The letter began by describing how the Taihang Mountains had turned from a historically fertile place to the barren wasteland it was today as a result of deforestation. It then described the recent, rapid rise in the Yellow River's silt content. Finally, it concluded that the Inner Mongolia Production and Construction Corps' actions would lead to severe ecological consequences. Ye noticed that Bai's style was similar to that of *Silent Spring*, precise and plain, but also poetic. Though her background was in technical subjects, she enjoyed the literary prose.

"It's beautiful," she said sincerely.

Bai nodded. "Then I'll send it." He took out a few fresh sheets of paper to make a clean copy of the draft. But his hands shook so much that he couldn't form any characters. This was a common reaction after using a chain saw for the first time. Their trembling hands couldn't even hold a rice bowl steady, let alone write legibly.

"Why don't I copy it for you?" Ye said. She took the pen from him.

"You have such pretty handwriting," Bai said as he looked at her first line of characters on the page. He poured a glass of water for Ye. His hands shook so much that he spilled some of the water. Ye moved the letter out of the way.

"You studied physics?" Bai asked.

"Astrophysics. Useless now." Ye did not even lift her head.

“You study the stars. How can that be useless? Colleges have reopened recently, but they’re not taking graduate students. For highly educated and skilled individuals like you to be sent to a place like this...”

Ye said nothing and kept on writing. She did not want to tell Bai that for someone like her to be able to join the Construction Corps was very fortunate. She didn’t want to comment on the way things were—there was nothing worthwhile to say.

The hut became quiet, filled only with the sound of pen nib scratching against paper. Ye could smell the fragrance of the sawdust on Bai’s body. For the first time since the death of her father, she experienced warmth in her heart and allowed herself to relax, momentarily letting down her guard against the world.

More than an hour later, she was done copying the letter. She wrote out the address on the envelope as Bai dictated it and got up to say good-bye.

At the door, she turned around. “Let me have your jacket. I’ll wash it for you.” She was surprised by her own boldness.

“No! How can I do that?” Bai shook his head. “The woman warriors of the Construction Corps work just as hard as the men every day. You should get back to have some rest. Tomorrow you have to get up at six to work in the mountains. Oh, Wenjie, I’ll be heading back to division headquarters the day after tomorrow. I will explain your situation to my superiors. Maybe it will help.”

“Thank you. But I like it here. It’s quiet.” Ye looked at the dim outline of the dark woods in the moonlight.

“Are you trying to run away from something?”

“I’m leaving,” Ye said in a soft voice. And she did.

Bai watched her slender figure disappear in the moonlight. Then he lifted his gaze to the dark woods that she had been looking at a moment earlier.

In the distance, the gigantic antenna on top of Radar Peak rose once again, giving off a cold metallic glint.

* * *

One afternoon three weeks later, Ye Wenjie was summoned back to company headquarters from the logging camp. As soon as she entered the office, she sensed the mood was wrong. The company commander and the political instructor were both present, along with a stranger with a stern expression. On the desk in front of the stranger was a black briefcase, and an envelope and a book lay next to it. The envelope was open, and the book was the copy of *Silent Spring* that she had read.

During those years, everyone had a special sensitivity for their own political situation. The sense was especially acute in Ye Wenjie. She felt the world around her closing in like a sack being drawn shut, and everything pressing in on her.

“Ye Wenjie, this is Director Zhang of the Division Political Department. He’s here to investigate. Her political instructor pointed at the stranger. “We hope you will cooperate fully and tell the truth.”

“Did you write this letter?” Director Zhang asked. He pulled the letter out of the envelope. Ye reached for it, but Zhang held on to the letter and showed it to her page by page until he reached the very last page, the one she was most interested in.

There was no signature except “The Revolutionary Masses.”

“No, I did not write this.” Ye shook her head in fright.

“But this is your handwriting.”

“Yes, but I just copied it for someone else.”

“Who?”

Normally, whenever she suffered some injustice at the company, Ye refused to protest openly. She simply endured silently, and would never consider implicating others. But this time was different. She understood very well what this meant.

“I helped a reporter from the *Great Production News*. He was here a few weeks ago. His name ___”

“Ye Wenjie!” Director Zhang’s two black eyes were trained on her like the barrels of two guns. “I am warning you: Framing others will only make your problem worse. We’ve already clarified the situation with Comrade Bai Mulin. His only involvement was posting the letter from Hohhot under your direction. He had no idea as to the letter’s contents.”

“He ... he said that?” Ye felt everything go black before her eyes.

Instead of answering, Director Zhang picked up the book. “Your letter was clearly inspired by this book.” He showed the book to the company director and the political instructor. “*Silent Spring* was published in America in 1962 and has been quite influential in the capitalist world.”

He then took another book out of the briefcase. The cover was white with black characters. “This is the Chinese translation. The appropriate authorities distributed it to select cadres as internal reference so that it could be criticized. As of now, the appropriate authorities have already given their clear judgment: The book is a toxic piece of reactionary propaganda. It takes the stance of pure historical idealism and espouses a doomsday theory. Under the guise of discussing environmental problems, it seeks to justify the ultimate corruption of the capitalist world. The content is extremely reactionary.”

“But this book ... it doesn’t belong to me.”

“Comrade Bai was appointed as a translator by the appropriate authorities. So it was perfectly legitimate for him to carry it. Of course, he is responsible for being careless and allowing you to steal it while he was participating in Construction Corps work assignments. From this book, you obtained intellectual weapons that could be used to attack socialism.”

Ye Wenjie held her tongue. She knew that she had already fallen to the bottom of the pit. Any struggle was useless.

* * *

Contrary to certain historical records that later became publicized, Bai Mulin did not intend to frame Ye Wenjie at the start. The letter he wrote to the central leadership in Beijing was likely based on

real sense of responsibility. Back then, many people wrote to the central leadership with all kinds of personal agendas. Most of these letters were never answered, but a few of the letter writers did so. Their political fortunes rise meteorically overnight, while others invited catastrophe. The political currents of the time were extremely complex. As a reporter, Bai believed he could read the currents and avoid dangerous sensitivities, but he was overconfident, and his letter touched a minefield that he did not know existed. After he heard about its reception, fear overwhelmed everything else. In order to protect himself, he decided to sacrifice Ye Wenjie.

Half a century later, historians would all agree that this event in 1969 was a turning point in humankind's history.

Without intending to, Bai became a key historical figure. But he never learned of this fact. Historians recorded the rest of his uneventful life with disappointment. He continued to work at *Green Production News* until 1975, when the Inner Mongolia Production and Construction Corps was disbanded. He was then sent to a city in Northeast China to work for the Science Association until the beginning of the eighties. Then he left the country for Canada, where he taught at a Chinese school in Ottawa until 1991, when he died from lung cancer. For the rest of his life, he never mentioned Ye Wenjie, and we do not know if he ever felt remorse or repented for his actions.

* * *

"Wenjie, the company has treated you extremely well." The company commander exhaled a thick cloud of smoke from his Mohe tobacco. He stared at the ground and continued. "By birth and family background, you're politically suspect. But we've always treated you as one of our own. Both the political instructor and I have spoken to you many times concerning your tendency to sequester yourself from the people, and your lack of self-motivation in seeking progress. We want to help you. But look at you! You've committed such a serious error!"

The political instructor picked up the theme. "I've always said that I thought she had a deep-rooted resentment of the Cultural Revolution."

"Have her escorted to division headquarters this afternoon, along with the evidence of her crime." Director Zhang said, his face impassive.

* * *

The three other women prisoners in the cell were taken away one by one until only Ye was left. The small pile of coal in the corner had been exhausted, and no one came to replenish it. The fire in the stove had gone out a while ago. It was so cold in the cell that Ye had to wrap herself in the blanket.

Two officials came to her before it got dark. The older one, a female cadre, was introduced by her associate as the military representative from the Intermediate People's Court.⁷

"My name is Cheng Lihua," the cadre introduced herself. She was in her forties, dressed in a military coat, and wore thick-rimmed glasses. Her face was gentle, and it was clear that she had been very beautiful when she was young. She spoke with a smile and instantly made people like her. Ye

sample content of The Three-Body Problem

- [download Introducing Chomsky: A Graphic Guide](#)
- [download Ascendant Sun \(The Saga of the Skolian Empire, Book 5\) online](#)
- [The Riverman: Ted Bundy and I Hunt for the Green River Killer for free](#)
- [The Heavens Are Empty: Discovering the Lost Town of Trochenbrod pdf, azw \(kindle\)](#)

- <http://transtrade.cz/?ebooks/As-If--Modern-Enchantment-and-the-Literary-PreHistory-of-Virtual-Reality.pdf>
- <http://www.experienceolvera.co.uk/library/Ascendant-Sun--The-Saga-of-the-Skolian-Empire--Book-5-.pdf>
- <http://cavalldecartro.highlandagency.es/library/The-New-Braiding-Handbook--60-Modern-Twists-on-the-Classic-Hairstyle.pdf>
- <http://bestarthritiscare.com/library/Sex-in-a-Sidecar.pdf>