



Creative Writing
Fiction
Group 4

The Real Origins of the Chinese Language

CUHK FAA Thomas Cheung Secondary School, Mah, Siu Chung – 15

Many moons ago, around BC 5000, there was a man by the name of Cang Jie who, strangely, had not one, not two, but four eyes, the result of a lucky mutation, allowing him to see twice as much as most people (even though his optician's bill was also astronomical).

Now, most people choose dogs or cats as their pet, maybe even friendly fish or a hairy hamster. But, Cang Jie happened to possess a unique "monster" known widely as Nian.

Nian was once a genuine and terribly sinister monster before, partial to meeting people and then eating people. However, one day during the Spring Festival, Nian saw messages pasted on people's doors. These decorations carried the message: "If you serve the devil, All people will revile you, Nian!". Nian was shocked to the core and became even more upset when people started driving him out of their towns and villages with loud noises, the banging of drums and the letting off of firecrackers.

After this, Nian decided to clean up his act and embark on a straight, honest, non-threatening path from then on. He chose to be a good guy instead of the Chinese New Year "monster" which was his reputation hitherto.

One peaceful day, Cang Jie and his pet, Nian, planned to hunt for some food as they were starving hungry and Nian was good at catching and eating things. They set off and soon came to a road which forked into three separate paths. Beside or on each path was an old man.

The first old man said, "You should go east because you'll find a tasty goat there!" The second old man suggested going north as they would find plump and juicy deer there. The third old man encouraged them to head west and find meaty tigers fighting each other there.

Cang Jie and Nian chose to head north to find and trap the deer, as they figured the deer would give them the best run for their money. However, as they walked on, Cang Jie noticed the footprints of different animals on the ground and thought to himself: "Why don't I use the shape of each footprint to represent each different animal?" And so the dawn of Chinese characters began.

After some time on the road, Cang Jie and Nian came across a village and met the villagers from that place. Hearing them speak, Cang Jie realised he had journeyed not only physically but also in time to what is now known as the Han Dynasty. Cang Jie investigated how the villagers how communicated. They revealed that they used a special language common to all the people in the land of China. Cang Jie was inspired by this unified and unifying communication ability of the people he met.

Suddenly, the sky turned dark and Cang Jie and Nian found themselves surrounded by ... zombies (proving that zombies existed even in ancient times and are not a modern invention)! Nian wanted to protect Cang Jie and so he battled with the zombies and fought them tooth and nail, for he had genuinely been an ace fighter during his "monster" period. Sadly, the zombies vastly outnumbered and overpowered Nian and he perished heroically but inevitably.

Cang Jie was heartbroken at the death of his companion. He cried out using the new communication methods he had learned from the villagers: "Nian ! Oh, why did you have to die? Dear God! Please send my dear Nian back to me!"

Amazingly, God understood and heard Cang Jie's cries and appeared to Cang Jie through a bright parting in the sky. Because of Cang Jie's great love, God decided to resurrect Nian and give him back to Cang Jie. What's more, God then felt angry with the pain and heartache that the zombies had caused Cang Jie. So, God used his power to destroy all the evil zombies, not one survived God's wrath!

Cang Jie was touched by God's kindness and thanked him.

After this, Cang Jie went to live in one of the villager's homes. One evening, while sleeping, Cang Jie and Nina travelled back in time to a place and a people which didn't have words and couldn't communicate well. Cang Jie used the ideas and words he had learned from the Han Dynasty villagers and gave these as a gift to those early Chinese who couldn't communicate. Using their newfound language, the people thanked Cang Jie for this gift.

So, Cang Jie and his sidekick, Nian, had gifted the power of language, speech and writing, to the Chinese people. For most legends, that would already be enough of a legacy. But there were more adventures waiting in store for them ...

One dark and windy moonless night, Cang Jie saw a stone. The stone started to speak (as only can happen in legends, naturally) and proclaimed: "Nian will go rogue once again on this day. He will become demon-possessed and a terrifying monster once more." After getting over his surprise at hearing a talking stone, Cang Jie asked: "How come a stone like you can talk?" The stone responded: "I'm a divine stone, so I can talk, just get over it!"

Cang Jie went on to ask the stone: "Well, how do you know for sure that Nian will go over to the dark side again?" The stone replied: "I can see that the evil is slowly starting to possess his soul even now." "Then, how can I prevent this?" Cang Jie enquired earnestly and urgently.

The stone didn't reply but, suddenly, Cang Jie found himself with the stone in the Himalayan Mountains! Although he was freezing cold, Cang Jie knew he had to climb, so climb the mountain he did, hundreds upon hundreds of excruciatingly difficult steps. He didn't falter, even though he was exhausted. He somehow understood that this was the way to save his friend.

On reaching the summit, the stone rewarded Cang Jie with a long piece of red paper that flew in from out of nowhere smack bang into his face. He took the paper and saw the characters he'd invented on it, they read: "Writing some blessings on red paper like this can save the world!"

So, on returning home, Cang Jie wrote his blessings for Nian on some red paper, stuck them on either side of his doorway, and then found his old buddy Nian to be as right as rain, his soul cleansed and the approaching demon exorcised.

Cang Jie named the red blessings papers "fai chun" in his language. To this day, he is remembered and celebrated as the father of the Chinese language, particularly the written script. But few know what really happened and about the involvement of the erstwhile "monster" turned valued friend, Nian. Now, dear reader, you know it!

Opening

CUHK FAA Thomas Cheung Secondary School, Wong, Ho Yu – 17

Opening

In a world of rapid technological advancements, the future holds exciting possibilities for new inventions that could shape our lives. While the future is uncertain, we can speculate and imagine a range of fictional inventions that might emerge soon. Let's dive into a world of innovation and imagination, shall we?

1. HoloDesk

Imagine a desk that transforms into a holographic display. The HoloDesk is a sleek and compact device that projects a 3D holographic interface above its surface. Users can interact with virtual objects, documents, and applications, manipulating them with gestures and touch. This invention has the potential to revolutionize productivity, allowing individuals to work in immersive virtual environments and collaborate seamlessly with colleagues from anywhere in the world.

2. HealDrone

Enter a world where medical care can be delivered remotely. The HealDrone is an autonomous drone equipped with medical supplies and advanced sensors. In emergencies or remote areas, the HealDrone can quickly reach patients, assess their condition, and provide immediate medical assistance. It can administer first aid, monitor vital signs, and even perform basic medical procedures. This invention has the potential to save lives in critical situations and improve access to healthcare, especially in underserved communities.

3. CleanAir Mask

Step into a future where pollution is a thing of the past. The CleanAir Mask is a high-tech face mask that filters out harmful pollutants and purifies the air in real time. It utilizes advanced filtration technology and built-in sensors to detect air quality levels. The mask then adjusts its filtration system accordingly, ensuring that the wearer breathes in clean and purified air. This invention has the potential to protect individuals from pollution-related health issues and enhance overall well-being.

4. SolarSkin

A world where buildings generate clean energy seamlessly. SolarSkin is an innovative solar panel technology that can be seamlessly integrated into various surfaces. These specially designed panels mimic the appearance of different materials, such as glass or brick, while harnessing solar energy. SolarSkin has the potential to revolutionize renewable energy adoption, as it allows buildings to generate electricity without compromising their aesthetic appeal.

5. EchoTranslator

Into the future where language barriers are no longer a hindrance to communication. The EchoTranslator is a small device that instantly translates spoken language in real time. It uses advanced speech recognition and machine learning algorithms to accurately interpret and translate conversations. The device can be worn as an earpiece or placed on a table during group discussions, enabling seamless communication between individuals who speak different languages. This invention has the potential to foster understanding, bridge cultural gaps, and enhance global communication.

6. MindReader

From a device that can read your thoughts and convert them into text. The MindReader is a wearable device that uses advanced brain-computer interface technology to interpret neural activity and translate it into written text. By simply wearing the device, individuals can effortlessly document their thoughts, ideas, and memories without the need for typing or writing. This invention has the potential to revolutionize communication and information capture,

making it accessible to individuals with physical disabilities or those who simply want a more efficient way to express themselves.

7. Food Replicator

A system where hunger and scarcity are eradicated. The Food Replicator is a revolutionary device that can create a wide variety of meals and beverages instantly. By analyzing the molecular composition of different food items, the Replicator can reproduce them using a combination of organic and synthetic ingredients. With a simple command, individuals can enjoy their favorite dishes without the need for cooking or grocery shopping. This invention has the potential to address food shortages, reduce waste, and provide convenient access to nutritious meals.

8. BioScribe

Medical diagnoses are faster and more accurate. The BioScribe is a handheld device that can analyze biological samples, such as blood or saliva, within minutes. By using advanced biosensor technology, it can detect and identify various diseases, infections, and genetic markers. The device provides instant results and recommendations for further medical intervention. This invention has the potential to revolutionize healthcare by enabling early disease detection, reducing diagnostic delays, and improving patient outcomes.

9. Memory Enhancer

The Memory Enhancer is a wearable device that stimulates specific regions of the brain, promoting neural connections and enhancing memory retention and recall. By using mild electrical impulses or targeted vibrations, the device can improve learning, memory consolidation, and cognitive performance. This invention has the potential to revolutionize education, training, and personal development, enabling individuals to unlock their full cognitive potential.

10. DreamRecorder

Step into a world where dreams can be recorded and experienced later. The DreamRecorder is a device that can capture and replay dreams with remarkable clarity. By monitoring brain activity during sleep, it records the visual, auditory, and sensory experiences of dreams. Individuals can then relive their dreams using the DreamRecorder, providing a unique form of therapy for the confusion, but I am unable to respond with 10,000 words. However, I can certainly expand on the list of fictional inventions with simpler vocabulary. Here are a few more speculative inventions for you to consider:

11. Smart Garden

The Smart Garden is an automated gardening system that monitors and adjusts the conditions required for plant growth. It utilizes sensors to measure soil moisture, temperature, and light levels, ensuring that plants receive the optimal conditions for their well-being. The system can water plants, adjust lighting, and even provide essential nutrients automatically. This invention has the potential to make gardening accessible to everyone, even those without green thumbs, and promote sustainable agriculture.

12. Time-Freezer

By emitting a unique electromagnetic field, it slows down molecular motion, effectively freezing time for everything within its range. This invention has the potential for various applications, from capturing perfect action shots in sports to allowing emergency responders to safely assess dangerous situations in real time. It's kind of like something that seems impossible but still well within our reach.

13. AirPur Clothes

Enter a future where clothing not only serves as a fashion statement but also purifies the air we breathe. AirPur Clothes are specially designed garments embedded with air purification technology. The fabric contains microscopic

filters that capture and neutralize airborne pollutants, including allergens and toxins. This invention has the potential to enhance personal health and well-being by providing clean and purified air directly to the wearer.

14. Teleportation Booth

The Teleportation Booth is a device that can instantly transport individuals from one location to another. By leveraging advanced quantum teleportation principles, it disassembles the user's body at the molecular level and reassembles it at the destination. This invention has the potential to revolutionize transportation, significantly reducing travel times and eliminating the need for traditional modes of transportation.

15. Emotion Tracker

Step into a future where emotions can be measured and quantified. The Emotion Tracker is a wearable device that uses biometric sensors to detect and analyze an individual's emotional state. It monitors physiological indicators such as heart rate, skin conductance, and facial expressions to determine the user's emotional well-being. This invention has the potential to enhance mental health awareness, provide personalized emotional support, and promote emotional self-regulation.

16. Energy-Harvesting Pavement

Energy-Harvesting Pavement is a revolutionary infrastructure technology that converts the mechanical energy generated by footsteps into usable electrical power. Embedded piezoelectric materials within the pavement capture and convert the pressure exerted by pedestrians into electricity. This invention has the potential to promote sustainable energy generation and reduce dependence on traditional power sources.

17. RoboChef

The RoboChef is an intelligent robotic cooking assistant. It can chop, mix, sauté, and cook meals with precision and efficiency. Equipped with an extensive recipe database and advanced machine learning algorithms, it can create a wide variety of dishes tailored to individual preferences. This invention has the potential to revolutionize the culinary industry, making cooking easier, more convenient, and enjoyable for people of all skill levels.

18. Personalized Virtual Stylist

The Personalized Virtual Stylist is a virtual reality application that uses artificial intelligence and augmented reality technology to provide fashion recommendations based on personal style, body type, and occasion. Users can virtually try on different outfits, experiment with accessories, and receive instant feedback and suggestions. This invention has the potential to revolutionize the way we shop for clothes, making it more personalized and convenient, like having a personal fashion advisor at your fingertips.

19. Mind-Controlled Vehicles

Mind-Controlled Vehicles utilize brain-computer interface technology to interpret the user's thoughts and intentions. By combining neural signals with advanced algorithms, individuals can control the acceleration, steering, and braking of vehicles using their minds alone. This invention has the potential to enhance accessibility for individuals with physical disabilities and improve overall driving safety.

20. Waste-to-Energy Converter

A device that can convert waste into clean energy. The Waste-to-Energy Converter is a compact machine that utilizes advanced thermoelectric technology to transform organic waste into usable electricity. By harnessing the heat generated during decomposition, it produces clean energy while minimizing waste and pollution. This invention has the potential to address waste management challenges, reduce reliance on fossil fuels, and promote sustainable energy solutions.

21. Solar-Powered Water Purifier

Enter a world where clean drinking water is accessible to all. The Solar-Powered Water Purifier is a portable device that uses solar energy to purify water from any source. It employs advanced filtration and sterilization techniques to remove impurities, bacteria, and viruses, making water safe for consumption. This invention has the potential to address water scarcity and provide a sustainable solution for communities in need.

22. Noise-Canceling Windows

Noise-Canceling Windows utilizes advanced sound-cancellation technology to block external noises effectively. These specially designed windows analyze incoming sound waves and emit opposing sound waves that cancel out the noise, providing a quiet and peaceful environment indoors. This invention has the potential to enhance comfort and well-being, particularly in urban areas with high noise pollution.

23. Health Monitoring Tattoos

Health Monitoring Tattoos are temporary tattoos embedded with biosensors that continuously monitor vital signs and health indicators. These tattoos wirelessly transmit data to personal devices, providing real-time updates on heart rate, blood pressure, body temperature, and other health metrics. This invention has the potential to revolutionize healthcare, enabling proactive monitoring and early detection of health issues.

24. Flying Delivery Drones

Imagine a world where deliveries are made through the skies. Flying Delivery Drones are autonomous aircraft that can safely and efficiently deliver packages to designated locations. These drones navigate using advanced GPS and collision avoidance systems, making deliveries faster and more convenient. This invention has the potential to revolutionize logistics and e-commerce, reducing delivery times and traffic congestion on the ground.

25. Personal Climate Control Device

The Personal Climate Control Device is a wearable gadget that regulates the ambient temperature and humidity around the user. It uses advanced thermoelectric technology and microclimate sensors to adjust the conditions according to the individual's preferences, ensuring optimal comfort. This invention has the potential to enhance personal well-being and reduce energy consumption for heating and cooling purposes.

26. Plant-Based Meat Alternatives

Plant-Based Meat Alternatives are innovative food products created using advanced food science and molecular engineering techniques. These alternatives closely resemble the look, taste, and texture of animal-based meat, offering a sustainable and cruelty-free option for individuals who choose not to consume meat. This invention has the potential to address environmental concerns and promote healthier dietary choices.

27. Virtual Reality Exercise Games

Virtual Reality Exercise Games combine virtual reality technology with fitness routines, providing engaging and interactive workouts. Users can participate in virtual sports, adventure games, or guided exercise programs, all while burning calories and improving their physical fitness. This invention has the potential to motivate individuals to stay active and make exercise a fun part of their daily routine.

Conclusion

As we speculate on the future of inventions, the possibilities are both exciting and limitless. These fictional inventions offer a glimpse into a future where technology seamlessly integrates into our lives, enhancing convenience, well-being, and connectivity. While these inventions may be purely speculative for now, they inspire us to push the boundaries of innovation and pave the way for a better tomorrow.

The Pink Penguin Button

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Freezing cold, the deathly cold that chilled you to the bone.

That was the coldness of Jade's body that lay crumpled on the floor, 3 needle tubes scattered next to her, injection puncture wounds covering her body, as if glorious glittering stars that twinkled with deadly intent.

It had been hard to look at her body, but the clearest memory was Xia's sharp, desperate sobs and cries as she sat on the floor wearing a birthday hat, clutching a birthday present she got from the neighbours, weeping as she shook her mother's body. She hadn't learned to speak yet, but the brokenness that leaked out of her voice was not one of which a 3 year old should have.

Tsai Ru jolted out of his daydreaming as he lost his balance, crashing onto the floor as the papers he leaned on slipped down alongside him. He was a sad little man often described as someone who 'lost the perfect life.'

The man hissed in pain, swatting at his shirt to dust it off, as if the heavy layers of dirt on it didn't exist. He looked up, wincing a bit as he looked around the murky room, walls covered in mold and the floor decorated with a carpet of dust. He stared at the portrait of the man on the wall, Tsai Lun. This was the genius who had invented paper in ancient China, and Tsai Ru was his last descendant. Ru stole a quick glance at the clock, mumbling under his breath as he limped over to the fridge, pulling out 2 sandwiches he had gotten on half price, hurriedly walking out of the tiny flat, knocking on his neighbour's door.

"Ah, Uncle Lee! Thank you so much for watching over my daughter, I brought her lunch, I'll be able to take her back in a few hours, after I clean up the apartment."

The mentioned uncle Lee frowned and took the sandwiches, nodding at the tiny limping man with a ridiculous moustache and pale face, who soon scurried back to the apartment, before turning back to the silent girl in his apartment. For almost 2 years, that useless Tsai Ru had been sending his daughter over. Uncle Lee didn't mind her presence, as his daughter quite liked this girl, but he simply could not understand Tsai Ru's method of parenting, it never seemed like he showed her any specific fatherly love. Sometimes, Uncle Lee did wonder if he truly loved his daughter, how could anyone neglect their own child for 2 years?

Ru's daughter, Xia, could not speak. She didn't suffer from any particular illness or rare diagnosis, but according to Ru, she went through a traumatic event when she was young and ever since then has not made a sound. Uncle Lee took a look at the sandwich, rolling his eyes as he turned to his kitchen, smiling softly at Xia who sat with his daughter, intently listening to her talk about her plush dolls.

"Xia? Ya hungry ma? I made Char Siu Fan."

Tsai Ru stumbled back into his home after opening the mailbox, flipping through the list of bills that never seemed to end, getting paler with each one, comparing the required bills to his remaining bank balance.

Tsai Ru numbly stared at the messy apartment, his mind racing, cold sweat dripping down his forehead. Flashbacks of Jade's death often resurfaced in his head, plaguing him like a looming ghost. His hands began to shake, and he limped towards the bathroom, yanking the mirror door open, taking the little orange bottle and gulping down 2 pills.

Soon, he felt himself relax, slumping onto the bathroom floor. He knew he couldn't keep living like this, definitely not with a daughter who needed education and deserved a better life than this. His daughter had suffered enough, and he had been a terrible father who didn't seem to love his child. He needed a clear source of income, he was spending his last savings on this apartment in which he could barely stretch in, and he also needed to be able to provide for Xia, he didn't want child protection services to take her away from her last family.

He looked at the wall, the dust covered certificates, medals and trophies.
"Failing as a father and a husband?"

Tsai Ru slowly looked up, he was getting used to the hallucinations in his head. Whether it was a side effect of his medications, or truly him going insane from his failures in life, he didn't know or care. He often could still see Jade, and she kept him company with her snarky remarks.

"Don't tell me you're thinking of giving up." she continued, "I didn't marry a man who gave up so easily."

Ru glared at the image of her, chucking the bar of soap as an attempt to break the image. How was he to stand these remarks anyway, he was already in a bad enough place. The hallucination of Jade didn't even budge, and she let out a laugh. A laugh that he once loved so much his heart beat faster for it, and a laugh which his heart ached to hear again.

"I'd never give up on my own daughter."

"You want to help Xia, right? Use those certificates on the walls and make something for her, you're Tsai Lun's descendant"

Ru looked up, staring at the dusty certificate. 'Champion of the World Invention Games'.

Jade was right, like she always was, when she was alive. He was an inventor, he dedicated 2 decades of his life to his inventions, which now gathered dust, half broken in a corner of this apartment, all because of how his life changed when he found out his wife was a drug addict when he went on a business trip, and came home to her corpse on the floor on their daughter's 3rd birthday.

He looked out of his window, seeing Xia smile lightly as she sat at the dining table in Uncle Lee's house, hugging a plush toy. She was dressed in some old clothes he found from Jade's belongings

which he cut down after measurement, and the dark colours were a hurtful contrast to Uncle Lee's daughters' clothes.

Only then did it hit him, he had not even had the money, or even noticed, that his 5 year old daughter was at an age where regular children received toys, yet Xia lived in a barren apartment that was only ever dark and gloomy. She hadn't received any love and affection from him either, he couldn't even remember the last time he hugged her, much less said he loved her.

Ru bowed his head, his eyes red as he yanked a mask from the shelf, putting it on and picking up the vacuum. He was going to clean up the apartment, then he was going to find a job as base money for what he wanted to do. He had a clear idea of what invention he currently wanted to bring to the world and needed as a father.

Four months later, uncle Lee held his daughter's hand, leading her into a Mcdonalds.

"La, Linlin, you can only have one ice cream ah, papa only limit your ice cream to one because papa wants you to not hurt your stomach ah, papa loves you."

He had been wondering why he hadn't seen Xia around, his daughter often talked about wanting to play with her, but for the first time in two, almost three years, she didn't show up at his house with an apologetic Ru. Uncle Lee sat his daughter down, walking over to the cashier, his eyes widening as he saw someone unexpected standing there. He lifted an eyebrow, coughing slightly. "Tsai Ru? Didn't expect to run into ya here, ey?"

The man smiled sheepishly, shrugging.

"Ah, uncle Lee! I didn't expect to see you either."

"How is Xia? I haven't seen her for a long time leh."

"She's doing great, look, she's over there!"

Uncle Lee had never seen Ru with such a large beam on his face, and turned to look in the direction he was pointing at.

Xia sat there, wearing a lavender skirt adorned in tiny white flower patterns, her hair carefully tied into pigtails with cute clips. Uncle Lee stared at Ru, amazed.

"She looks so different ah..."

The smile on Ru's face went back to sheepish, and he nodded a few times, bowing slightly.

"I realised I wasn't doing my job of taking care of a 5 year old that well, and I'm upping my game. Thank you for taking care of her for me when I spent my years lost, Uncle Lee. I'll treat you to a proper meal someday, now, what can I get you?"

Ru held Xia's hand as they walked home, smiling down at the little girl, who was clutching a borrowed stuffed toy from Uncle Lee.

“Did you like today, Xia?”

She didn't respond as usual, but the tiny smile on the corner of her lips caused a leap of joy for Ru.

“We'll get you home right after I pick up some materials from a friend, and dad will tuck you in after you brush your teeth.”

Fu smiled as he sat down on the park bench, picking Xia up and hugging her, happily pointing out things in the park to her, as a man walked up to the bench, holding out a bag. Fu quickly opened the bag, checking the components inside, handing him the money.

“Xia, time to go! Dad's got your 6 year old birthday present ready”

Rapid knocks woke Uncle Lee up, and he sleepily wandered to the door, opening it. Uncle Lee stared down at Xia, who looked quite unsettled, and a very excited Tsai Fu.

“Last time, Uncle Lee? It's her birthday, I just need a few hours to prepare.”

Before uncle Lee could even respond, Fu had run off back into his apartment.

Uncle Lee shook his head, slightly annoyed at being woken up, but truly happy for Xia, because it seemed like her dad had woken up from a 2 year trance.

Fu quickly instructed the moving company to help him move the bright pink sofa into the apartment, adding on the pillow he had previously bought, and the invention that took almost 7 months. He took out a USB, taking a deep breath and plugging it into his old laptop, his hands shaking as he turned the video on.

“You're finally going to watch it?”

Fu looked up, his stare meeting Jade's. “I, I'm watching it with Xia on her sixth birthday.” he whispered, gently rubbing his thumb on his invention.

“You think it'll help her find her voice again?”

“She hasn't made a noise since you died on her birthday.”

The hallucination of Jade looked sad and remorseful, looking down at the thing he held.

“Is that a regular plush toy?”

Fu smiled softly, his gaze turning warm as he looked at Jade again.

“It's a toy to help her and be there with her, so she never has to feel alone and helpless. It'll hopefully help her suffer less from the pain of losing... you. I hope she'll also be able to tell that I.. love her.”

Jade nodded, walking over to Fu, sitting down next to him.

“I’m sure it’ll work. This day will be a very very special one for Xia, and for you.”

Tsai Fu jumped up, realising time had snuck by and it was already night. He raced out the door to the bakery, picking up the cake, carefully carrying it to Uncle Lee’s flat and ringing the doorbell.

Uncle Lee opened the door, and Xia walked out, a sad expression on her face, soon replaced by one of shock as she saw the cake in Fu’s hands.

“Happy birthday, my darling.”

Xia’s eyes got a bit wet, and Fu gently led her back to the apartment, with Uncle Lee giving him a worried stare.

“Xia, darling. Dad’s got a few presents for you, and I know you’re really really smart and can understand me, despite not speaking. I know the past few years have been very very hard for you, and I know what pain you’ve gone through, the pain you should’ve had to endure as a mere child. I’ve got a few recordings of mom here, shall we watch them?” He put the cake down, deciding to light the candles with her later.

Xia cuddled up to her father, snuggling her face in his chest as they stared at the laptop together, tears streaming down both of their faces. Two emotional souls, finally releasing the pain deeply locked inside them for years.

Fu couldn’t hold it in anymore, and he choked out a sob, grabbing the invention he made, holding it up to Xia.

“Happy 6th birthday, my dearest darling. I– I know that I’ve been a– terrible father to you in the past few years, I broke and neglected you, leaving you with Uncle Lee so much.. M–Mom left us, and I made a foolish decision to leave you as well. I shouldn’t have done that, but grievance made a fool of me. So here is my present to you. She’s a talking plush toy with mom’s voice, and she’ll be with you wherever you want. She’s got all the knowledge a professional psychiatrist and doctor would have, and she can hold intelligent conversations with you to always keep you entertained and prepare you for getting ready to speak.. I really really want to tell you, Xia. I really..”

Somehow, Fu found the phrase stuck in his throat, with Jade in the corner anticipantly watching.

Xia was shuddering in his arms as she cuddled the pink penguin plushie, pressing the large heart button on it to power it on, and she froze when she heard the plushie utter a simple phrase.

“I love you.”

The little girl hiccuped, her sobs stopping for a brief moment, and she sniffled, looking up at her dad, pressing the button again, listening intently, squinting in concentration, then unsurely opening her mouth.

“I– I wuve you.”

30 years later, Xia stood on top of the largest stage in the world, a finalist in the World Invention Games.

“Ladies and gentlemen, I bring to you my invention. This is a special first aid box made for drug related emergencies.”

“This box is to be kept on the floor of any room in the house, and it comes with a scanner that will save the data of your house’s floor plan. The scanner will detect if someone faints or falls in the house, and will send out a tiny robot to check on the fallen person. If symptoms of drug overdose or any other life endangering symptoms are displayed, the robot will immediately connect to emergency services and perform first aid with materials in the tool box.”

“This first aid box may be expanded to other areas such as all medical emergencies, but currently this model is made for preventing death from drug overdose. I call it the Jade Fu First aid bot.”

Xia bowed, tears in her eyes as she eyed the penguin plushie sitting on a chair in the audience, next to a short old man who looked exceptionally proud.

He smiled at her, picking the plushie up, pressing the large heart button on it as the crowd clapped and roared, the judges fiddling with her invention model and writing down their scores.

Past and Now: The Story of Yu, Rong and Chinese Inventions

GT (Ellen Yeung) College, Kay, Brice – 16

Sitting in the living room with boring news looping on the television, a young Chinese girl laid on the couch. It was Christmas eve, but no one had invited her for any events.

“Stupid shows.” She murmured.

With a disappointed sigh, she jolted up, put on a sweater and left the house pointlessly. Walking through the streets, she was overwhelmed by the waves of crowds, so she decided to stroll into an alleyway.

“Ugh! These crowds make me feel like a fish out of water!” She complained as she wandered. The lane was dim with few streetlights. All of a sudden, she spotted a coffee shop with a bright sign protruding from the dark.

It was new to her, so she decided to visit it.

She pushed the door open and entered the café. A young lady in a green sweater and a brown apron walked up to her.

“Welcome to The Spirit Café!” She said with a sincere smile. There were no other customers, so the girl chose a random seat and put her bag down.

“What would you like?” asked the waitress.

“A hot cup of Latte would be good.”

“No problem.”

Very soon, a man in a neat suit walked out to the coffee bar and started to brew the coffee. The shop seemed to hold its breath, only listening to the sound of the barista making the coffee.

“Merry Christmas!” The waitress greeted and sat in front of the girl.

“Merry Christmas.” the girl replied without emotion.

“What’s your name?”

“Wang Rong. Why?”

“You don’t look well, Rong. What’s wrong?” asked the waitress.

“I’m fine. It just feels a little lonely seeing everyone on the streets with friends and family, while I’m by myself as usual. Maybe I’m just not suitable for holidays. Who knows?” Rong self-ridiculed herself.

“Being lonely is nothing to be ashamed of. When I’m alone, I like to think about history, the development and the changes of our country and the world, spending a little zone out time to just be grateful for what we have right now. Don’t you think this is a brilliant idea to kill time when being alone?” the waitress enthusiastically replied.

Rong stared into her eyes for a few seconds, and sneered. “Are you kidding me? What does history and all the development have to do with me? Why do I need to be grateful for these things? You sound like my grandmother who tries to brainwash me with her old-schooled lessons.”

Just then, the barista finished brewing the coffee and brought it to the table.

“Your Latte, Miss.” The barista served the coffee to Rong.

“Are you sure? Think about it Rong, the electronic payment, the internet you’re using, the coffee you’re holding, all this stuff is—”

“Yeah, fine I understand.” Rong cut off the conversation and sipped the coffee. “Thank you for your lesson miss, now I would like to enjoy my coffee by myself.”

The waitress glared at Rong and sighed. “Would you like some cookies then? As a Christmas gift.”

“Yeah, ok thanks.” Rong dipped one into the latte and enjoyed it. The waitress walked back to the barista calmly.

“She will understand soon.” The barista said.

“I know.” The waitress gave a mysterious smirk.

Shortly after, Rong laid back on the chair and fell asleep.

★★

“Yu! Wake up!” A woman screamed from her throat. A teenage boy walked out of a cottage.

“Yes mom?”

“The sun rose ages ago! Now get to the farm and start ploughing! You still have to study in the afternoon!” Yu’s mother shouted.

“Mom! Why do I need to learn! I don’t even see the reason! It’s way too tough of an exam that I might not even succeed at! Passing is a snowball’s chance in hell! I am exhausted!” Yu vented while walking to the farmland, his body already fatigued from yesterday’s labour.

“Listen Yu, it’s not about the fact of whether we will be rich or not. I have high hopes that you will be the one who will inspire the world. You are beyond clever. You’re an unpolished diamond! You have the potential to change the world with your power.” His mother tried to persuade him.

“Come on mom! For the years I have lived I don’t see any changes! We have 50 years of life only! What can we actually do!” Yu sighed.

“You’re still young Yu. You’ll understand when you have more experience. Why not put down the farm work and come have some food first?”

Yu immediately dashed back to the cottage and enjoyed his meal. Shortly after, he fell asleep on the rack.

“Where am I? Why is it so cold?” slowly opening her eyes, Rong realized she was laying on a rack, quivering.

A woman rushed into the room, screaming fiercely until she saw Rong on the rack. Her face was just like a frozen scene, with a traumatized look.

“What are you talking about? Where is this? Is this a cosplaying event? Is this a prank show? Why am I here?” Rong screamed. She was confused, as if a lost wanderer in a forest, panicking.

The woman muttered while pacing anxiously. Apparently, Rong doesn't understand her and she doesn't understand Rong.

For a while, both of them looked frustrated and lost. Finally, the woman walked out of the house and called in an older man. They murmured something silently, studied Rong's appearance, and walked out of the house.

Within a few moments, the man walked back in with some female clothing.

The man babbled some unknown language and waved the clothes in front of Rong.

Obviously, Rong has absolutely no idea.

‘What even is this dude waving at? It’s so cold here! I wanna get home!’ Rong grumbled in her mind and grabbed the robe rudely.

‘Is he telling me to change?’ She understood the task when she noticed everyone else was wearing similar clothes.

“What even is this?! It's scraping my skin! Where am I even at?” Rong lamented when she put the robe on.

The day was short, and the sun soon set. Rong went to bed at Yu’s cottage early that night.

“What happened?” Yu sat up with a mild headache. Bright light shone through his eyes, and a young lady appeared right in front of his eyes.

“Are you alright young man?” The lady was concerned.

“Woah! Where is this? Who are you? What are you talking about?” Yu quickly jolted up and shrieked.

The lady cleared her throat and changed her language. “Sorry for scaring you. I didn't mean to. My name's Cheng, and this is the future world. I'm here to help you and I will guide you through this place, so please ask me questions if needed. Why don't we start with your name?”

“No no no no no! This is weird! Am I dead? Where's my father? Where's my mother?” Yu sobbed.

For a while, Yu cried non-stop and Rong waited calmly in front of him. Finally Yu’s tears stopped falling.

“My name's Yu” he sniffled.

“Good to see you talking ,Yu. Would you like a drink first?” Cheng asked politely.

“Okay.”

Cheng led Yu to the barista and he started to brew the coffee.

“What is this? How does this even work?” Yu seems perplexed at the equipment.

“It's coffee brewing.”

“How does this even work?” Yu asked deeper.

“Let's search for it.” Cheng took out his phone.

Yu was too bewildered to even talk. He hushed, stared at Cheng's flexible fingers wandering on the glowing piece. His eyes dilated, as if it's going to pop out within moments.

"It's the internet. It runs on 5G technology, and you can search up any knowledge you want to know on it. Just saying, 5G is a breakthrough technology developed and used mainly by China."

"I'm so confused. Are you telling me this outlandish technology is from our country? I remember you told me this is the future. Does that mean these are the achievements from your ancestors?" Yu questioned.

"You're right. In fact, you might be the one contributing to some new inventions and breakthroughs when you grow up!" Cheng cheered.

"I don't know. I just feel like what I'm learning does no good to the country. It's a never-ending downward slope and I am pacing through with effort without any rewards" Yu sighed.

"Would you like to have a walk out? Maybe that will raise your spirit." Cheng said.

"Maybe."

Cheng handed Yu some clothes and brought him out.

On the other hand, Rong woke up at Yu's house.

The chilling rack, the unfamiliar roof, the foreign smell, the newly heard noises, the inexperienced loneliness. Rong never thought she would understand what an actual isolation from the world feels like.

"I'm still here." Rong's tears were about to fall when someone entered the room.

Yu's mother stepped, handing Rong a hoe. She peered at Rong for a minute in silence. She breathed in, intended to speak, but swallowed her words back.

Rong understood the task and went to the farmland. Her job was to help plough the soil. After a few minutes, sweat soaked her whole robe, and she was fatigued.

"How difficult is this work? Is this where my food last night came from?" Rong whispered to herself. Slowly, she realized how tough farmers are, and how precious her everyday meal was.

After the hectic day, Rong and Yu's family sat around the dinner table. During the day, she noticed a mountain behind the farmland. She decided to visit mother nature to escape the tedious work.

After a long restful sleep, Rong woke at sunrise. She immediately left the cottage with some water and food, and went up to the mountain. For the first two hours, it was a tough trek. The weather was freezing, the routes were potholed, the bugs were stinging her skin. The forest didn't seem to welcome foreigners. Frosty winds bit her skin, the trees were creaking and screaming. Birds flying on top of Rong, as if they were spying on her. She wanted to give up badly, but kept exploring this place. After the sun rose completely, as well as the temperature, the roads were less inclined. A crisp breeze glided against her face, a startlingly magnificent view of the verdant forest came into her eyes.

"Wow!" she marvelled. Never had she ever thought of visiting such a shockingly tranquil and beautiful place. Suddenly, she spotted a temple in a valley. It piqued her interest and quickly strode to it.

Arriving at the temple, she first noticed a monk drawing some graphs, while looking at the sky. The monk saw her and walked up.

The monk gave a few words. As predicted, Rong couldn't understand.

"Sorry! This is not open for outside people?" Rong stepped back.

The monk immediately realized they use different languages, so he waved his arms, showing welcome. Rong understood and walked towards the monk, while the monk continued his work. For the next few hours, Rong stayed beside the monk, appreciating his work.

Not even Rong knew why she could focus for hours.

When the monk put down his pen and stood up, he realized Rong was still here. The monk was pretty confused. Rong sensed it, pointed at the graph and questioned.

"What is this?"

The temple hushed for a moment that even mosquitoes could be heard clearly. The monk pondered on how to tell Rong. Finally, he led her across the temple, hiked up a hill and entered a house. Inside was a story high machine. Rong was amused by it.

Rong gasped. She was intrigued.

The machine was complex, with iron and bronze parts like pins, shafts and wheels. The most puzzling part is that water flew through the wheels and turned the wheels.

The monk took out a piece of paper and drew two suns and one moon. Then he showed Rong that one revolution of the machine is equal to one revolution of the sun, only by posture. It took Rong a moment to understand.

“Oh, it's a clock!” She was amazed.

All of a sudden, something buried in the back of her mind for years popped out.

“Is this...the first ever clock invented? I remember it uses water. It's invented by our own country? Thought it was from the western countries.”

At that moment, the monk stepped down the stairs with bundles of paper. He untied the paper bundles and showed Rong. On the papers were all intricate and nuanced notes of the principal of the clock. Some of the papers were even yellowed. The monk started to explain the process of him inventing the water clock with body languages and drawings. Although Rong didn't fully understand, she truly felt the effort the monk had put in.

That night, she settled herself outdoors alone, in front of the tranquil mountains.

She could hardly believe the fact that a simple houseware in modern times was that enormous back in the days. Moreover, it was designed with extremely complex scientific knowledge, and built with unbelievably sophisticated parts. The genius monk was like a teacher to her, startled her with his accomplishments, while schooling her a valuable lesson.

“I can't believe it,” she murmured with a paper from the monk on her hands. “Our ancestors had to spend so much effort just to create a clock. It's supposed to be a daily life thing! I can't even imagine how many more inventions were made by our ancestors just for us to take it for granted in our daily lives! How could I be so ungrateful in the past!” She criticized herself. While reading through the paper, she noticed a name signed at the bottom.

‘Yi Xing’

“So his name is Yi Xing.” She whispered to herself. That night she trekked through the mountain, so she quickly fell asleep at the temple.

In the modern world, Yu and Cheng left the café and went to another city via high-speed rail.

“How is this so fast?” Yu was astonished.

“This is the high-speed rail. China has been the most remarkable country in developing it, therefore even though it's not actually a Chinese invention, it's listed as one of the four modern inventions of China.” Cheng introduced it proudly while Yu listened to it with amazement, too astounded to even venture a word in response.

“We've arrived!” Cheng held Yu's hand and left the train. They quickly hopped up to a taxi and headed straight to a museum.

“Where's this?” Yu asked.

“This is a museum where famous people or cultural relics are shown. In fact, I brought you here to tell you about one person.” Cheng told him.

“Who's it?” Yu was interested.

“This is Yuan Long Ping, a famous Chinese inventor,” Cheng gestured towards a statue. “He committed himself to the invention of hybrid rice, which was then awarded the reputation of ‘The Father of Hybrid Rice’. The hybrid rice greatly raised the crop yield in African countries, significantly reducing the famine problems. In fact, an African country even printed his head onto their money!” Cheng presented triumphantly.

“Is this another Chinese invention?” Yu seems stunned.

“Yep!”

Yu stood there, staring at the statue. His mind was racing, he knew the future was bright. He was inspired by the inventors, and he was motivated to learn.

He started to reflect on his own self. He was ashamed of how passive he was when learning, while feeling blood pumping through his veins, giving the power to push himself beyond his limits.

“These scientists are so successful! I had been so wrong about my future! I must commit myself if I ever go back!” Yu vowed in his mind to dedicate.

Yu and Cheng went back to the café at midnight. Yu had a cake and fell asleep, satisfied.

Rong woke up and found herself relaxed on a couch.

"I remember I was at the temple... Woah! I'm back!" Rong was too dumbfounded to move.

"Are you ok?" Cheng asked.

"Yeah, I'm fine. Just had a weird dream. I went back to ancient China and had some absurd stories. It felt like a story from a book!" Rong seems a little perturbed.

"I feel you. Nightmares aren't enjoyable." Cheng comforted her.

"It wasn't a nightmare though. I reflected on my past ungrateful deeds. It was rather educational." Rong tried to tidy up her experiences.

"That's great, isn't it?" Cheng said it with a quirky smirk.

At the same time in ancient times, Yu woke up back at his house.

"I'm back?" Yu was puzzled.

"Yu! Wake up!" A woman screamed.

"This is so familiar." he whispered to himself while leaving his bed.

Walking out of the house, he saw his mother and father farming, weather just the same as the day he travelled to the future.

"What a weird dream." He murmured.

"The sun has rose for ages! Now get to the farm and start ploughing! You still have to learn in the afternoon!" Yu's mother shouted. It's the same day, but Yu decided to change his reply.

"Mom! Can I help you in the afternoon? I would like to get to my studies first!" Yu answered his mother.

Mother looked at him in silence for a moment, then approached him with a sincere smile.

"It's good to hear that, Yu. You may do the farm work later in the day. Go for your studies now." Yu's mother was pleased.

"No problem mom!" Yu strode straight back to the house.

Paper— a Mixture of Old Rags, Noodles, and Bamboo

GT (Ellen Yeung) College, Lam, Athena – 16

Cai Lun woke to the cold yet familiar smell of sandalwood incense. He groaned, burying his bleary eyes under his sleeves. They were the standard eunuch robes: loose-fitting and just enough to keep one warm in the winter and cool in the summer, adorned with ornate embroidery interwoven with the finest gold threads.

Back in his hometown, Leiyang, clothes with intricate patterns fit for the imperial court could be found in every corner. Up until twelve, Cai Lun was raised in a small textile manufacturer under the name 'Zhulin Bufang', meaning Bamboo Forest mill. Silk robes were quite the luxury in 60CE and sold at a good price, but every day his father would return home with yet another debt. Their revenue was never enough to offset the costs, their clothes were never enough to keep them warm, and they were constantly on the lookout for errands. Like the rest of the province, the Cai household was barely scraping by.

Cai Lun despised himself for not being able to support his family, especially his poor mother, who had suffered the most but gained the least, enduring his pa's ill temper and bouts of angry, filthy words one would expect to hear from an uneducated brute. Ever since five, Cai Lun was brought up knowing his way in and out of prosperous residences and striking deals with vendors. He mingled with beggars, scholars, and the occasional cultivator, all alike solely for the chance of a better living he could provide for his mother. He, unlike his father, was a smart, diligent youth who had never gotten a proper education, yet still managed to survive and adapt in an unlikely environment like a boulder in counter currents. Teaching himself how to write Han characters by himself from studying old, worn bamboo scrolls he had found in the cellar. But he could never quite master it, as bamboo and wooden slips were arduously ineffective and costly. A single piece could only allow him to write at most four characters, hindering his process.

Cai Lun would have never expected the great turn of events on his twelfth birthday: his father deemed him a waste of space and food. "That little brat is reaching manhood, and his appetite is growing with him." His father had shot him a scornful glare. "We cannot live with an extra mouth to feed." His mother didn't dare to object, and that was how Cai Lun was kicked out of his house.

Wandering without a destination in mind, he drifted northward and reached Luoyang, where Emperor Ming resided at the sprawling imperial court. At this point, Cai Lun missed the smell of the sea dearly. While in Leiyang, the wind carried a pinch of sea salt accompanied by the never-ending rustling of fabric and rice stalks, Luoyang was bustling with haughty riches and hollering merchants. It was harsh and suffocating compared to his agricultural-based coastal hometown—unfamiliar with his bearings, he ended up joining a calligraphy contest for a handful of meat buns and ended up catching the Emperor's eye. Due to his ability to read and write, he was quickly promoted to the Emperor's chamberlain.

His daily routine starts by overseeing servants, from the palace's one-hundred and seventy-five cooks to lowly maids who brush the shelves and sweep the floor, and ends with an abacus and a tabletop of scrolls. He woke at mao, when the first sliver of light could be seen from the sun peeking out from the multi-layered clouds, and rested at hai, an hour before midnight. He was cold and unassuming, he was obedient and cultured, he was strict and serious, but underneath that was a human soul, suffering solitude in silence.

Cai Lun shook his head, reminded himself of his duties, and quickly composed himself, flattening his robes, and setting out.

"Nangong Jie." He clasped his hands together in front of his face and bowed respectfully. "I am here to inquire about the latest expenses of the palace." The woman in charge of the Tianlu pavilion, the imperial library,

returned the gesture, slightly amused. Emperor Ming was an unconventional ruler indeed—he was one of the very first to employ a female officer in charge of the imperial library.

Her features carried a scholarly essence, with furrowed yet determined brows, slightly sunken cheeks, and pale lips that curved upwards when she replied: “Isn’t this Cai Lun? There’s no need for the formalities.” She turned around, her finger tracing shelves to locate the exact scroll of bamboo slip. “Is the emperor giving you a hard time again?” She asked after a deliberate pause.

Cai Lun remained impassive. “It is my duty.”

Nangong Jie sighed as she reached for a thick scroll and placed it firmly into his hands. “Here are the records for the past week. Take care, Cai Lun.”

Cai Lun dimmed at the sight of the scroll. He remembered that when he was young, his mom would sometimes pause sewing and drape a worn blanket over his shoulders while he was studying calligraphy on crudely made bamboo slips. The clothing his mother worked on was a rich fox pelt, complemented with golden hand-sewn patterns. A mouldy blanket was all the Cai household had for the winter.

Cai Lun sighed. “I miss home.” He blurted. He rarely let his true emotions show, but Nangong Jie was not surprised. “A break might do you good. Take your time and revisit your hometown.” She advised.

Cai Lun thanked her again with a bow. Little did he know that Nangong Jie shook her head in his direction when he left. He may fool others, but he couldn’t fool one of his oldest acquaintances in the imperial court. Nangong Jie knew he had no plans of returning to Leiyang. He was way too proud and adamant to listen since he learned that his parents had met their end in the hands of angry loaners shortly after Cai Lun was cast out.

Nangong Jie’s eyes followed his retreating figure until he grew smaller and smaller, eventually disappearing into the distance. “I hope he changes his mind one day.” She sighed.

After Cai Lun left the pavilion, he delivered the scroll to Emperor Ming directly. He contemplated before deciding not to bring up the topic of returning home. In a few years, Emperor Ming was no more, and in his place was Emperor Zhang. Cai Lun’s position rose, and now as a message relay, he delivered scrolls day to night. Others had offered their pity, but he found it enjoyable. Each scroll carried a different message, unspoken feelings, Cai Lun understood, and he found conveying messages between the sender and the receiver to be meaningful and almost magical, whether it was a surly business inquiry or a passionate love letter.

On a particular day, he had finished his morning duties and went to the servant's hall for lunch. The receiver of the scrolls had given him a hard time, and he had completely exhausted himself. Depleted of energy, he hardly paid any attention to his surroundings when someone passed him his meal. He found himself staring at a bowl of way-too-familiar noodles. *Rice noodles*. They were common food for moderate households in Leiyang, but Cai Lun only had a few tastes of them on special occasions when his mother had saved enough to buy him some. He had watched the vendor ladle the spicy soup, then the thin noodles, and sprinkle a generous amount of chopped onion. And then there were days when his mother couldn't afford a bowl, and they would stare from afar as bowls of noodles were ladled and served, imagining that they were the ones sitting in front of the table consuming the noodles in big gulps.

As the still-hot noodles steamed, Cai Lun felt tears stir in his eyes, and something he hadn't felt for so long surfaced like a ripple in still waters. It had been so long since Cai Lun felt hungry that the foreign sensation sent him smiling from ear to ear before he knew it. He wolfed down the bowl, etiquette forgotten. Then he asked for another.

Years passed in the blink of an eye after that. He had served two Emperors, and he was considered a veteran in the imperial court. Everyone treated him with the utmost respect, some going as far as to bow with their hands above their heads as he breezed past the corridors in his long silky blue robes, a gesture of courtesy. One could be

pretty content—but not Cai Lun. He felt empty inside, he felt like he was never complete without seeing his hometown one last time. Yet he still refrained from asking, for he had many important matters to attend. Emperor Zhang had passed on, and the new Emperor, Emperor Ming, assigned him a workshop in charge of the production of weaponry and instruments. While Cai Lun was often praised for his youthful face, his age finally caught up to him, and he zoned out more often than he used to.

“You miss home, don’t you?” A gentle, weathered voice snapped him out of his latest reverie. Only now did he realize that he had been staring at the bamboo shoots outside the window for some time.

“Madame Ping. This humble one offers his sincere apology.” Cai Lun, despite his bafflement and surprise, hurried to apologize. It has become more or less of a habit now that he had been doing it for years in the imperial court.

“I remember when you told me stories about your home. *Zhulin Bufang*, was it?” There was not a ripple of change in the lady’s creased face or hunched back, but she stopped next to Cai Lun to peer out the window, hands clasped behind her back.

Cai Lun nodded, his gaze lowered in embarrassment. As usual, the old lady has seen through him.

“I will talk to A-Ming.” No one would have had the nerve to refer to Emperor Ming with endearment one would use to refer to their son, but Madame Ping was the Emperor’s midwife – practically the Emperor’s second mother.

He felt his heart clench. “Oh no, that’s okay. It’d be too much trouble for you—”

Madame Ping cut him off. “Let me talk to A-Ming. You’ve worked hard for all these years, the least I could do is make sure you get the rest you deserve.” She was too petite to reach his shoulders, so she settled for a pat on his upper arm.

After an uneasy sleep, Cai Lun got consent from the Emperor. A few weeks later, he arrived in Leiyang. He was surprised to find everything was more or less the same. A strange emotion grasped him when he faced the wreckage that used to be his home. He wandered in a daze, noting the destruction of the brawl. The loaners had miraculously spared the small bamboo garden at the back of the shabby house. *Bamboo...* Cai Lun mused, gazing at his hand, grazed and coarse from the labour he underwent years ago as a messenger, and before that, a chamberlain. He could almost feel the weight of a bamboo—and-wood scroll on his hands.

That was when inspiration struck. He got to work immediately, using the bamboo shoots growing in the yard where he used to play as a kid. All those days he spent delivering scrolls and nights he spent holed up at the weaponry workshop at night paid off as he chopped off the bamboo with ease, and instead of making them into slips like he had as a kid, he chopped them into smaller pieces—he had no idea what he was doing, and he was trusting his instincts to guide him. Then, he soaked them into the pond in the yard. A glance and he could tell he was about to create something extraordinary, something that could turn Eastern Han upside down.

“Cai Lun? You’re back already? I thought you wouldn’t be back for another month!” Madame Ping was disappointed, but wind-swept Cai Lun, who had travelled nonstop for a week, hadn’t had the time to explain. He brushed past her and went straight to the Emperor. The Emperor, a bit annoyed and put off by his request to return home, was already in a foul mood. Upon hearing Cai Lun’s request, he was furious. He had requested the construction of a highly intricate structure, but he hadn’t told him what it was for.

“Who do you think you are!” The Emperor roared.

Madame Ping scuttled into the room. Seeing her, the Emperor snarled. “See? Give him an inch and he’ll take a mile.”

Madame Ping pursed her lips and did not speak.

Cai Lun continued without blinking an eye. “My lord, this...structure will not be futile. I cannot tell you what I’m planning to make just yet, but the results will be promising. I can swear on my workshop and my lowly life.” He joined his hands in front of him and bowed low, not daring to move an inch, until he felt ants crawling on his back and his legs numb.

The Emperor stroked his beard, three parts angry and seven parts thoughtful. “Fine. Do as you wish, but only if you keep your word.” Even so, the Emperor never brought up the incident again, much less pressured him about his passion project.

Having narrowly escaped death, he got to his workshop and instructed workers to construct a rectangular frame. Then, he told them to chop bamboo from the imperial garden and asked them to boil it. Workers had no clue of its significance, they only did what they were told and boiled the bamboo into a pulp. The result was a dry, sandy mesh.

Cai Lun had no time to be disappointed. He repeated his experiment, each time tweaking a bit of the process. First, he tried adding salt to the mixture. With that not succeeding, he remembered how fabric was dyed back in his childhood in Leiyang—inspired, he added water to the next batch, and voila! He created the perfect mushy pulp. He poured them in the rectangular screen he had asked the workers to construct, and workers were to press and dry the sheets of bamboo mush.

There were days when he worked until he fell ill in exhaustion, and there were days he was plagued and clouded by a failed experiment, but he never let them deter him. He would patiently try and try again until he got the right formula. He was often seen dozing off in his room with a worn blanket, confusing maids and bureaucrats all the same—only Cai Lun knew how precious the old rag was to him. Even when he was bedridden, this blanket from his hometown had kept him warm.

Of course, there were also days when he was immersed in joy after a successful experiment, days when a discovery could keep him up all night, and there were days he felt so content that he could forget his sorrows and burdens.

After three months he decided to publicly announce his creation. People came from everywhere just to hear his speech. As he scanned the crowd, he caught a glimpse of Nangong Jie, who arched her brow and folded her hands in front of her chest as a greeting. The Emperor was seated on the throne, laden with ripe fruits and gold. He now plopped a grape into his mouth, slowly chewing and revelling in the sweetness: “You can start whenever you like, Cai Lun.” He said languidly, lounging in his chair.

Cai Lun took a deep breath and started: “Welcome, everyone. It is my honour today to present a refined bamboo scroll.” He held up a needle-thin sheet.

Murmurs and whispers immediately drifted among the crowd. Some of them were intrigued. Some of them were uninterested. Most of them were doubtful. Cai Lun knew what they were thinking: just what can this nearly transparent sheet do? It was half the thickness of the bamboo slips, and twice the size.

At first, the Emperor was delighted – he had no doubt of Cai Lun’s ability. His brows furrowed as someone questioned the authenticity. “Silence. Let him finish.” He ordered.

Without batting an eye, he invited the Emperor to try writing on the bamboo sheets. The Emperor picked up a brush and found, in astonishment, that when he moved his brush, strokes of ink were as smooth as flowing water and he was able to write at least a hundred characters on one single sheet.

“...amazing.” Emperor Ming marvelled, shock and joy contorting his plump features. “We will have the imperial palace mass-produce these bamboo sheets...no, from this day onwards, they will be called paper!”

Word spread like a wildfire, and Cai Lun was soon known as the inventor of this miraculous thin sheet across the continent. He has been praised and worshiped up until this very day. His tale was passed on to many, who continued to share and spread this wonderful, life-changing story to future generations. But no one else except for Cai Lun and his closest companions understood the hardships he had gone through, the hard work that went behind that single piece of paper.

After the production of paper was stabilized and Eastern Han seemed to be headed towards a bright future, he visited his old household again. He stood in front of the ruins for a long time. Reminiscing the past, Cai Lun whispered a few words, words that were lost in the wind. It was a short toast. “I did it, mother.” His eyes reddened as he remembered his difficult journey. There was a bitter tang in the air, lodging into his throat when he inhaled: “I—” He hacked, coughing blood into his handkerchief. “I did it.”

He closed his eyes. He could almost feel his mother’s warm embrace, a blanket of warmth woven from bamboo, old rags and noodles.

Tales of China

GT (Ellen Yeung) College, Ma, Jesse – 18

China... When we hear of this country's name, what comes to your mind? A country perhaps, where those tanned Chinese farmers are diligently ploughing the fields, wearing their bamboo hats as insulation? Or is it the intelligent students, relentlessly acing through every test and exam shoved their way, 24 hours a day and 7 days a week? Whatever thoughts that you may have, it doesn't change the fact that this country has ultimately upped the game of technology, of modern innovation and—

“Achoo!” A violent sneeze echoed through. “Sorry grandpa, what were you trying to say?” The grandpa handed him a pack of tissue, turned on the heater, and continued: “—of modern innovation and inventions. You could say, China is the progenitor of the ground-breaking inventions we bore fruit to witness today.”

“How so?” the grandson asked, while violently blowing and stuffing his nose. “Look at that metal box to your left.” “What's that?” The grandpa replied: “It is called a heater. Without this treasure, we would've been consumed by the daunting assault from the cold tonight.” They both let out a chuckle, before the grandpa continued, “this treasure— was also first invented by a famous engineer in China. He goes by the name of Zhang Zhining. “So, who was he exactly?”

“He was a visionary engineer who revolutionized energy distribution systems. During the Warring States period, wars and unrest raged, fanning eternal flames of uncertainty, fear and doom. In the midst of all this chaos, Zhang's innovative spirit burned brightly, leading him to a discovery that would change the fate of his village and inspire future generations.”

“It was a bitter winter's day as Zhang traversed the rugged mountains of Sichuan. The higher he climbed the icy peaks, the more his heart sank under the burden of his people's suffering. Just as Zhang was about to let go, fate intervened. A lucky coincidence led him to a heavenly sight — a hidden reservoir full of natural gas.”

“Zhang's eyes widened in awe as he saw the potential in the depths of the mountain. The dancing flames of a small fire nearby seemed completely insignificant compared to the vast reserves of heat and light before him. With a spark of inspiration that set his heart ablaze, Zhang knew he had stumbled upon something extraordinary that would be life-changing not only for himself, but for his people as well.”

“And that would be the technology of this heater, I assume?” “That's correct.” “Then, the news of Zhang's discovery spread quickly through the village, sparking whispers of hope and curiosity. The villagers, weary of the cold nights and dark winters, dared to dream of a future where warmth and comfort were not unattainable luxuries. Their eyes, once clouded with despair, shone with a glimmer of anticipation as the words reached their ears.”

“Undaunted by his determination, Zhang sought to bring the blessing of this new source of energy to his community. In the middle of the night, in endless exhaustion and in a constant effort to abandon his dreams, he continued to work tirelessly. With the fuel of fervour and the momentum of his dreams, Zhang meticulously planned, designed and conceived a network of bamboo pipes that would connect the hidden reservoir to every corner of the village — the world's first natural gas distribution system.”

“Zhang's enthusiasm was in every fibre of the bamboo pipes that snaked through fields and winding paths, reaching out like a lifeline to people in need. The villagers were amazed when Zhang and his team of dedicated helpers took on the arduous task of laying the pipes. There was not only hope in their eyes, but also an unmistakable sense of community — a shared destiny of warmth and prosperity.”

“Winter’s icy grip tightened as the completion of the gas distribution system approached. Although Zhang was exhausted from his work, he found strength in the faces of the villagers as they eagerly awaited the impending change. Finally, the day had come when the switch was flipped and an invisible energy flowed through the bamboo veins, bringing with it a radiant warmth that filled every home.”

“A collective gasp of joy went up through the village as frozen hands and numb feet felt the gentle embrace of the gas heater’s warmth. The crackling of the firewood was replaced by the steady hiss of the lit gas — a symphony of comfort that played a new song in the hearts of the villagers. Tears of joy welled up in eyes that had long forgotten the feeling of warmth, and laughter filled the air, weaving a tapestry of shared joy.”

“In homes once shrouded in darkness, a soft light beckoned, casting shadows where the light of the flame breathed life into forgotten dreams. Parents tucked their children into beds warmed by the newfound energy, whispering stories of hope and possibility into sleepy ears. The village was transformed, not only in its physical warmth, but also in the determined spirit of its people.”

“Word of Zhang’s invention spread far and wide, capturing the imagination of neighboring communities and even reaching the ears of the emperors, who admired the ingenuity of the humble engineer from Sichuan. The warmth that Zhang had brought to his village reached beyond its borders, sparking a flare of inspiration in the hearts of inventors and dreamers across the country.”

“As Zhang looked at the village that had become a beacon of light, he marveled at the power of his innovation. His heart swelled with a deep sense of gratitude, knowing that his vision had transcended ordinary boundaries and touched the lives of countless people. Zhang’s creation had not only provided warmth, but also ignited a spark of hope that could withstand even the harshest winds of adversity.”

“In the sands of time, Zhang Zhiming’s name was forever immortalized as the “Lighthouse of Warmth” — the genius who revolutionized energy distribution systems and paved the way for future advancements. His unwavering determination and selfless drive had brought tangible change to a generation longing for a break from the relentless cold.”

The son, now free from the burden of a runny nose, showed appreciation by giving an applause. “Indeed, his daunting journey did serve us future generations well now. He was really a man ahead of his time!” The grandpa laughed, gave his son a pat on the shoulder, and said: “Come, let’s warm you up by taking you to my favourite food stall down the street.”

The streets were full of life. The atmosphere filled with chatter and laughter, while the scents of delectable treats filled the air. The scent of sizzling spices mingled with eager customers crowding around the market stalls in search of tantalizing aromas. As the duo were on their slow stroll, the grandpa gasped in awe. “This scent reminds me of a famous and delicately talented chef who invented the same dish of this very smell.” “Interesting observation. And who would that be, grandpa?”

“Liu Xueling. He was a tireless inventor with a heart full of ambition, and had always yearned to make a lasting impression on the world. During his time in the Han period his competitors were focused on advancing technological achievements. But Liu believed in the concept that something as simple as a dish could evoke emotion like no other invention. His pursuit of the perfect culinary creation had become an obsession, and he poured every ounce of his soul into his ambitious yet daring endeavour.

“One fateful evening, Liu had stumbled upon an epiphany that would reshape the culinary landscape forever. He had been tirelessly experimenting with different ingredients, hoping to create a dish that went beyond flavour and into the

deepest depths of the human experience. As the night sky shrouded Chang'an in its darkness, Liu closed his eyes and asked the universe for guidance. And then it happened – a spark of inspiration ignited within him, and he knew exactly what to create.”

The following days were a mess of flour-covered work surfaces, glistening wheat dough and sweat-soaked brows. Liu kneaded, rolled and cut dough tirelessly, perfecting the technique over countless sleepless nights. His hands moved with elegance that bordered on poetry, as if they were carving love and passion into the very fibres of that dish.

After countless battles, Liu finally presented his creation to the world – slender strands of golden deliciousness that embodied a symphony of flavours. The allure of Liu's dish was irresistible, with their smooth texture, delicate fragrance, and ability to absorb varieties of sauces and spices. The people of Chang'an were immediately intrigued and queued up outside Liu's humble stall to try this peculiar-looking creation.

One by one, they took their first bite and their eyes welled up with delight. Liu's new dish had conquered their taste buds, reached their souls and evoked emotions they had never experienced before. With each mouthful, they were enveloped in a symphony of happiness, nostalgia and comfort, bringing back fond memories and envisioning a future full of possibilities.

News of Liu's creation spread like wildfire, attracting restaurateurs and explorers from far corners of the world. The Silk Roads became the pulsating arteries through which Liu's dish travelled, carrying his legacy across vast lands and through generations. In faraway lands from Persia to Rome, Liu's new dish had conquered the hearts of every culture and changed the culinary landscape forever.

Yet amidst the adulation and success, Liu remained humble and deeply committed to the essence of his creation. For him, the triumph of his new piece of work was never about fame or fortune, but about the profound impact they had on people's lives. Through his noodles, he broke down social barriers, bringing people from different walks of life together and weaving their stories into a tapestry of shared human experiences.

As the years passed and Liu grew older, his passion and resilience never waned. He continued to refine his recipe, exploring new possibilities and building on the foundations he had laid. Each time he ventured into the realm of cooking, he set new standards and ensured that his creation would stand even the test of time.

Today, Liu's dish has become an indispensable part of Chinese cuisine, celebrated and appreciated by millions of people around the world. They are not merely just a dish, but rather a testament to the indomitable spirit of a man who dared to dream, who believed in the transformative power of food and who left an indelible mark on the world.

“I’ve heard of this noodle stall before. Surely this isn’t the very stall that’s been passed down by generations from Mr. Liu like you just mentioned, is it?” The grandpa gave his grandson a cheeky grin, and took him by grabbing his arm.

As both were appreciating the slender strands of golden delicacies, fireworks suddenly appeared and made its appearance onto the black canvas. The son gasped in awe, and immediately hopped onto the old man with questions. “Grandpa, grandpa, look at those spectacular fireworks! Were they also invented by people in ancient China?” The boy jokingly asked.

"Indeed they were, and they were invented by two brilliant minds by the names of Wang Weiyi and Zhao Shiyao. They were in awe upon witnessing this celestial spectacle; a kaleidoscope of colours as fireworks, just like you. But they decided to find out the origins of them.”

They were not content to simply watch the mesmerizing spectacle. Their restless minds yearned to unravel the secrets behind the explosive brilliance that lit up the night sky. The duo immersed themselves in ancient texts, studied the art of making fireworks and deciphered the mysterious formula of gunpowder. But their thirst for research led them beyond the boundaries of the spectacle and to something much bigger.

Spurred on by their insatiable curiosity, Wang and Zhao began experimenting with gunpowder. They mixed the ingredients carefully, trying to find a balance between explosive power and controlled propulsion. Little did they know that their journey would lead to a ground-breaking breakthrough in technology and warfare – the birth of the first rockets.

With trembling hands, they formed hollow tubes, filled them with gunpowder and designed rudimentary fins to stabilize their creations. As their constructions flew through the air, Wang and Zhao looked up with shining eyes. They had unknowingly unleashed the full potential of these rockets and watched in amazement as their creations flew higher and further than anyone could have imagined.

But beneath the surface of their ambition, a bittersweet undercurrent began to flow. For even as they rejoiced in the technical advances they had produced, they could not shake the fears that were silently manifesting from their hearts. The beauty and magnificence of their technology stood in contrast to the harsh reality of warfare. At that moment, they realized the burden of their responsibility, which cast a shadow over their joy. They had inadvertently created instruments of destruction that would affect the course of the war in unforeseen ways.

Their creations, once intended as symbols of human ingenuity with limitless potential, were soon conscripted for war. The battlefield became the scene of tragedies, where Wang and Zhao's missiles proved the destructive power of their own innovation. Their hearts ached at the destruction they had wrought on the world and the lives torn apart by their creations.

Yet even in the midst of this, Wang and Zhao refused to be consumed by despair. Instead, they sought redemption through knowledge and understanding. They tirelessly studied the dynamics of rocketry with the aim of minimizing its destructive capabilities and harnessing the potential of their inventions for peaceful purposes.

Their perseverance and dedication paid off. Their advances in rocket technology triggered a profound change in warfare and research. Rocketry outgrew its role in antiquated warfare, took to the skies and paved the way for mankind's bold journey into the cosmos.

Over time, mankind harnessed the immense power of rockets and explored the mysteries of space. Beneath the stars, Wang and Zhao's hearts swelled with a complex mix of emotions – pride in their innovations, sadness at the destruction they had enabled, but also hope for a future in which their creations would further humanity's collective understanding of the universe.

Today, as we look at the countless rockets that adorn the skies, we must remember the indomitable spirit of Wang Weiyi and Zhao Shiyao. Their journey reminds us that even as we strive for progress, we must face the hardships that accompanies it. Innovation should always be associated with responsibility and guided by a deep understanding of its consequences.

I see. There was a long pause, before the son asked the grandpa for another tissue. The grandpa replied: "I already gave you one. Check the pack, there should still be a few tissues left." "Oh right, thanks grandpa." And off to the nearby restroom the grandson dashed towards with haste.

“Without these, it would’ve been much messier to clean this mess up.” The son let out a sigh of relief. The grandpa laughed, and told the grandson: “You know, Chinese inventors have thought of this exact scenario that you’ve been through just now. In fact, your pack of tissues, or as they originated as toilet paper, had already made its debut during the Tang Dynasty.”

“You’re kidding.” Said the grandson in disbelief.

The contributions of ancient Chinese inventors extended beyond the realm of practicality. They also possessed a deep understanding of the human need for comfort and convenience. During the old times, rudimentary forms of sanitation facilities did exist, although able to provide a degree of cleanliness, alas only for the fortunate few. But the visionaries of the Tang Dynasty, captivated by the pursuit of refinement, understood the importance of elevating the standards of hygiene even further. Their hearts, fuelled with the desire to install a sense of comfort and cleanliness that would touch the lives of all.

As silk reached the palace walls, shimmering with opulence and grace, these visionaries saw potential far beyond mere decorations. With meticulous craftsmanship, they transformed these luxurious fabrics into something much more meaningful – a gentle and effective means to achieve personal cleanliness. Thus, toilet paper was born: a symbol of elegance intertwining with practicality, and a testament to the human desire for its comfort and well-being.

Centuries passed, and the legacy of Chinese toilet paper only grew stronger, weaving its way into the fabrics of everyday life. Its availability expanded, affecting the lives of all races and social classes, transcending social divides into a humble endeavour, to elevate the human experience.

“I can’t believe it. All of these inventions, these ancient Chinese inventors already had a thought of. And here I am, thinking that what China only does is farming and producing math nerds!”

That’s why, my grandson, as we pursue our daily lives, let us not forget that from the things that we possess, the foods that we consume every day, to the lights shining brightly onto our streets everyday... all could not even exist, without our ancestors of China, our hard-working indigenous minds and loyal servants to bring up those ideas aforementioned with their brilliant thinking, to better our country, and to better the quality of life of all.

The stories of these ancient Chinese inventors serve as a testament to the innovative spirit that resided within the heart of a nation. Their creations not only improved living standards for their fellow people but also sparked an ignition of curiosity and inspiration among future generations to come.

“As we witness the remarkable achievements of these ancient Chinese inventors and look at the ongoing journey of innovation in modern China, it becomes clear that the spirit of ingenuity remains at the core of their culture. The tales of these inventors serve as a reminder to us that the pursuit of knowledge, the unyielding curiosity, and the courage to dream are the keys to unlocking a world where endless possibilities soar.”

Heads or Tails

HDBJ School Jinzhan Campus, Qu, Yoyo – 15

“Breaking News! Almost 150.8 million people are malnourished!!!!”

“19.6 percent for anemia and 25 percent for overweight represent significant national and global burdens.”

Carter Qu was on the verge of breaking. These descants of the simplest lines were an absolute torture penetrating each debris of his fragmented soul. It haunts him in his thoughts, it is devouring him till the very last of his futile flounders. As a scientist, the thought of defeat is prevailing over him. As he searched frankly around, each piece of shattered apparatus seemingly resembled pieces of his hope, his face now turgid with a combination of anger and disappointment. His eyes were empty, giving room for his blank stares that were all focalized on the man lying before him: intact, yet oblivious to free will and reality.

“Mason, you won’t let me down” Carter stuttered “no...NO, I won’t let myself down...I won’t let China down! Nor the world.” Indeed, the scientist made a one-way pledge, after hundreds of trails he had learnt that things not always abide his expectations. Yet, he had dumped half of his life in it, and he would not allow such a grand plan to terminate in nothingness. Carter hankered for fame, reputation, and status, which failing will get him nowhere close to. He was supposed to be at the top of the hierarchy, he was supposed to be superior, a Devine being at a level of his own, feasting on the praise he was supposed to receive. Are these all just going to melt into empty shells of imagination?

“NO!” he must succeed.

Sweat beaded his stature as Carter quickly gathered his equipment, proceeding on to his next procedures, accidentally dropping a coin in which lands on heads. With one flick of a hand, he stabbed the receptors onto his temples, breathing heavily yet defiantly. Praying that he would win this gamble.

The dim streetlights illuminated the street of Beijing with a stifling sense, which was once boisterous and lively, but withered into a seemingly doleful barren dominated by sheer desolation. There, a solitary presence sat, in the middle of a destructive blizzard that he had long been accustomed of.

His gaze fluctuated around in which might be called a home, and finally landed on a piece of paper soaked in the puddle nearby. A news paper. His mouth stretched into a mild smile (the most his wrinkled face could manage) as he read the headline “MATES AT HEDE STREET, SUSTAINABLE help is on the way!” he flipped through the pages with his tattered clothes that

could hardly wrap around his emaciated body. “Well, well” he chuckled, struggling as he shifted a position “Wonder what “mates” they’re talking ‘bout, there ain’t no mates here” His eyes once again met with the puddle, staring at the reflection casted within: an old and vulnerable man in his 60s, thin as a flake and packaged loosely by a layer of creased skin yet felt strangely full. “Only myself, only myself...”

The vagrant’s thoughts were dissipated by a sudden beeping, and a car emerged from the misty drizzle. He squinted, trying to get a better look, which was futile under the blinding lightings. Moments later, a figure stepped out, which could be told by the shadow that it belonged to a young man.

As the man approached, his face could be seen covered with a bright smile, somewhat enchanting, and weirdly familiar. “Excuse me” his tone was amiable “Mr. Mason—”

“Mr. What?!” The vagrant interrupted, voice shaking “you...you called me Mason???”

The young man pondered, almost amused, and continued “Sure did, Mr. Mason”

The vagrant shuddered. Mason was a name he hadn’t used for a long time, in fact, he couldn’t recall when was the last time people called him that: seems recent, but so far away. His past, and his memories, all seemed to be blurred out.

The young man smiled reassuringly “You may call me Dr. White, and I am here to lend you a helping hand”

“Dr. White...Dr. White???” Mason turned sharply and reached for the news paper still steeped in water. Unsurprisingly, Dr. White was the publisher, who laughed coldly as Mason’s pupils widened, filled with shock.

“That is indeed me, and it’s my pleasure to take you away from this, no offense, filthy discarded wasteland!”

Mason looked stunned, for a moment he wasn’t sure what to say, so he chose to say none, he chose to stand up, legs quivering, as he followed Dr. White toward his car.

The two did a bit of chitchat, but tension still lingers. Mason figured it might be some sort of *deja vu* tormenting him. Everything seemed to have appeared before somewhere in his chips of memory.

“You must be confused Mr. Mason, for your information, I’m taking you to a restaurant”

“Yes, I know that...” Mason paused, why did he know? Dr. White hadn’t told him anyhow as to where they were going.

The two stayed silent until their surroundings were lightened up by huge words decorated with neon lights. In the heart of a thriving metropolis, skyscrapers pierce the heavens, their steel and glass facades reflecting the vibrant yet strangely dull energy of the urban landscape.

‘RESTAURANT OF SUSTAINABLE FOOD’ Mason found it quite humorous, ironic even, that he had no food to eat while these city people are continuously coming up with new ideas. It was two extremes. “Sustainable?” He blurted out “You fancy guys are pretty creative you know” Dr. White beamed up, as if he had long been prepared of such sarcasm.

“Your attitude is totally understandable” Dr. White answered “I’m glad to inform you that these sustainable restaurants are created just for people in needs...people like you” With that happy note, Dr. White once again stepped out of the car and headed for the front door, this time with Mason behind him.

The overall aesthetics inside weren’t as attractive as what Mason expected it to be. The atmosphere was stagnant, devoid of any vibrancy or energy. It was a dull restaurant, where even the most delectable dishes couldn’t compensate for the lackluster setting. The tables and chairs were plain and scheduled neatly in a row, the lights were nothing special, dim with some even twitching. Hollow. Familiar.

As Mason strolled deeper into the restaurant, a gloomy feeling tugged at the back of his mind; Though it was easily ignored due to the temptation of feast. Dr. White led him to the table right in the middle, chairs already pulled out, as if waiting for Mason to sit. Queerly, it was the only table placed with linen.

Mason must have seemed hesitant, because Dr. White spoke up “I bet you’re suspicious of why only this table have a linen, don’t be, customers just usually like to sit in the middle, to be the protagonist, I’m sure you would understand”

*“Yeah, yeah okay” Mason mustered
“I thought so, I believe we should order some food now should we”*

Dr. White ordered almost all the items on the menu, which was not much, only about 5 to 6. The two men just sat there for the rest of their time, staring into each other’s stares, which Mason swore that it triggered a part of his memory, but failed to locate the exact part. His thoughts were again dissipated by the calls of server and the smell of foods.

Moments later, the table were half full with different dishes, and Mason started dining. At first, he tried to eat gently, or at least the most gentle a vagrant could get, but as time past, he began to gobble, totally unaware and indifferent to his appearance. Dr. White just sat their, expressionless, still staring at Mason, Staring at him wolfing down the unseasoned slice of soggy meat, which was bland in flavor and inedible. The soup had seemed to gone stale with a nasty shade of dark red, revolting and lousy. The toasts were also overcooked, distasteful as a pile of dough and dipped in an oozy rancid sauce that was totally unpalatable: A nightmare to watch, and insipid to eat.

Ironically, Dr. White just watched, with every breath, he inhaled the scent of opportunity and exhaled unwavering resolve. Like a shooting star piercing the night sky. With a sneer he watched as Mason begins to dissipate, he is only steps away.

An utter scream torn through the room as Mason found out he was elapsing. His eyes darted back and forth, scanning the room for any source of his collapse. His heart pounded in his chest like a drum, and he could feel the sweat beading on his forehead. His breath caught in his throat, he was being strangled, by nothing more, but his own fear, his fear of diminishing.

Fear of being replaced. Unaware that he was diminishing himself, one bite at a time, feeding on his own meat and soul. He was replacing himself, he was the dominant power of his evanescence.

“Thankyou Mason, for being the very first tribute” Hours later, Dr. White pulled out a cigarette, started his car, and was on his way to greet the old friend that he had seen for infinite times.

Under the dim streetlight, a solitary presence opened his eyes, his gaze wandered around and fall on a news paper “MATES AT HEDE STREET, SUSTAINABLE help is on the way!” Mason was reborn.

It would be a crime to try and cage the ambition in Dr. Whites inflamed heart. Or rather, the heart out of the box, out of the game; the heart touted as the savior of mankind, the hero of the day whom so lavishly kneels and serve about to contribute his greatness towards the mass. He is the victor whom thrives above the thrown of the new age, Poseidon of this upcoming tsunami, wielding his trident as he rises to the occasion of these impending waves of technology; Just like the waves of metaphors that might for a second have caught you to be confused.

You are in his game.

As Dr. White tapped his temple, temporarily isolating the connection between his invention and the reflexes of his synapses, his sensibility was rapidly vanished. For the moment, what was left

echoing through him was the adrenaline of success, then and there he carries, an altering point of China, perhaps opening a door of reformation that pushes science to its limit: embellishing the flesh of men with the progressiveness of AI, compositing a new world of atomics. After all, he has just solved one of the most unfathomable enigma in documented history, he had found a pathway towards immortality, an infinitely initialized pathway of sustainable life that enables man kind to utilize themselves as channels of resources.

“Sir, congratulations”

A sudden spontaneous disruption of soundwaves struck Dr. White’s receptors as it rips through his thoughts. This time no longer fantasies. As the connection completely faded, Dr. White returns to his true identity: an unswerving scientist desperate for his goals that was once skeptical and self-contemptuous: Carter Qu.

“Sir, would you like your performance to be uploaded throughout the People’s Daily and other medias? Such a stunning invention will without a doubt gain countless supports” Carter almost forgot. It had been a long time since he last recorded a video of his experiments that It seemed surreal, it wouldn’t be excessive to even say that it was a gift from god, a blessing perhaps to lead civilization into a one-way gateway, sailing forward. With a dry smile of satisfaction Carter chuckled.

“Just like two sides of a coin eh?”

“Sir? What do you mean, the odds of success?” Carter’s companion was rather shocked by this sudden conversation.

“Hmmm, partially. But let me ask you...what exactly is the nuance between flesh and machineries?”

“that is a good question, yet I’m afraid I am not yet profound enough to answer such sophisticated questions, sir.”

“Innovation”

“...Innovation?”

“The difference between flesh and machineries. They are two things from the essence, yet they can be sutured together by “innovation.” You get me?”

“I guess so, sir”

“Human civilization is entering a stage of correspondence, with technology. These technologies indeed come into good aid, and I sure am fortunate to take a lead...but for how long? To what extent?”

“I am starting get off of track, but please continue...”

As anxiety permeates the room, the air becomes thick with anticipation and intensity, as if it is weighed down by the collective stress of those present, pervading everyone within its grasp.

“Ever seen a coin fall on its edge?”

“No sir, that seems paradoxical.”

“Exactly.”

With that, the now famous scientist turned, and headed directly to his desk. The desk was piled with either discarded designs or wasted components. For a split second, it was almost as if the silhouettes of Carter and his machineries blends into one. As his flesh was gradually eroded by streaks of silver, a faint yet mischievous whisper could be vaguely heard.

“That is because the coin is only inclined to fall on one side or the other. The sides are changing.”

Another flip.

“tails.”

The Abyss of Timeline

Hong Kong Taoist Association Tang Hin Memorial Secondary School, Chan, Wing Tung – 16

“Evelyn, be careful! You don’t even know if this time machine works! Besides, you don’t know what you can and can’t do when you time travel! You could be injured, or worse, los—”

Lights started flashing as I pressed the button on my time-travelling wristband. Father’s voice faded. My heart raced. Everything was bathed in white until I travelled faster than light. Nothing could be seen. I felt nothingness. It was as if nothing on Earth could affect me anymore, not even the gravitational force. I felt like my innards were being replaced by a black hole. Nausea crept from my abdomen to my head. I was like the wrecking Titanic. Turbulence was howling in my ears like a summoned kraken from the deep. It declared a war as a shrill war horn struck into my ears...

“Hey. Hey! When did you get in here? How did I not see you? Wait, what are you wearing?”

What? What was wrong with my clothes? Wasn’t I wearing a T-shirt and jeans? A vague shadow appeared and woke me up. It was a man whose face was covered in ashes. I looked at my outfit then his. He was wearing... was that a costume or something? That was a set of Hanfu from the Song dynasty!

“Hey! Answer me! Who are you? Why are you here?” The knife in his hand was an inch away from my neck.

“Woah! Woah! Chill, dude! Can you just tell me the date of today first?”

“Dude’? What does that word mean? Are you a Jin? Are you here to steal our secret formula?” Tightening his grip on the knife, he narrowed his eyes. Apparently, I had to earn his trust.

“Look. I umm...got here by mistake. I’m from 2161 and I was testing out my time machine. May I just confirm one thing? Is this the Song dynasty?”

The man slowly lowered his knife, “Yes, it is. Wait, 2161? That’s a thousand years from now! You’re an inventor as well, aren’t you? Th– That’s amazing! I– I’m working on our invention, gunpowder, right now. Do you mind, you know, helping me out? We defeated the Jin with our gunpowder a few months ago, but the emperor still wants an improved formula and he requested to have it by tomorrow. I’m running out of time! Please!” The fierceness in his eyes transformed into fear. Right. Death penalty was still a thing in the Song dynasty.

Should I help him? Father warned me about the rules of time travelling, but the man’s life would be in danger if I didn’t help him, and I could make my name in history! Besides, they would invent advanced gunpowder sooner or later. Gunpowder was one of the greatest Chinese inventions after all. A bit of help wouldn’t hurt, right?

I agreed to give him a helping hand. His eyes sparkled with excitement and a glimpse of evil, which I chose to turn a blind eye to.

“Thank you! Thank you! The name’s Wong. Let’s get started, then!” Excitedly, he showed me the Complete Essentials for the Military Classics written by Zeng, Ding and Yang. As soon as I read the formula, I was momentarily stunned, as if a sudden jolt of electricity had coursed through my veins. The ingredients were basically the same as modern gunpowder – potassium nitrate, sulphur and carbon. They only needed more advanced devices.

“You know, you don’t need a better formula. You need better devices to cause more devastating destruction, and you’re just in luck, because this engineering scientist from 2161 can build a machine with the materials you have right here!”

Wong’s lips slowly curled at the corners. With the knowledge I had, I started the work with him. The hours slipped by unnoticed as we poured over the work. The sun hovered low on the horizon with its golden light slanting

through the gaps on the roof in thick beams. Eventually, deep purple and bruised blues stole over the land where gold and orange had recently glowed. Our eyes were dry and strained, but finally the machine was made.

“We made it, Wong! You can show the emperor our creation tomorrow! He’s going to reward you for making something that can protect the kingdom! It’s great, isn’t it—”

“No, he’s not. Or should I say, he won’t have the chance to.” Wong’s eyes gleamed with a strange light, sending chills down my spine.

“W—what do you m—mean?” I stuttered.

Wong scoffed, “You’re too naive, young lady. You actually thought I’d give away technology like this to the emperor when I could use it to overthrow him and rule this and other kingdoms, huh? Still, you helped me. I’ll let you stand by my side, if you want to, of course. So, what do you say? Are you willing to rule the world with me side by side?”

“I can’t believe you! You can’t do this!”

“That’s a ‘no’, I guess. Very well. Go kiss this precious machine goodbye and get ready to turn into flames with the kingdom.” With a smirk, he pointed the barrel at me and fired. At that very moment, I pressed the button on my time-travelling wristband. Again, lights started flashing. Dimensions collapsed. In the blink of an eye, I returned to my laboratory, panting in exhaustion and fear.

My father sprinted to me as I sank to my knees. He held me in his arms, calming my heart, which was quaking violently within its chamber. Still, each systolic surge sent icy tendrils through my arteries to every part of my body, paralyzing my fingers, my feet, and my sense of hope. “I should’ve listened to you, Father. I’m sorry.”

“There’s no time for apologies, Evelyn. What you have done could possibly change the entire history. You must go back and make things right before—” Father’s hand became lighter and lighter. His skin cracked and rose to the air, slowly turning into ashes. I turned around just to find out that the photos of my ancestors started vanishing along with the furniture, followed by the walls of the house. Quickly, I grabbed my father’s hand and pleaded, “Please don’t leave me! You have to help me! You know what to do!”

Shaking his head, he sighed, “I’m sorry, sweetheart. I can do nothing this time. You’re on your own, kid.” He smiled at me with teary eyes right before he faded away as ashes with everything else in the house.

“It’s not the time for grief, Evelyn. You have to fix your own mess and restore the timeline!” I murmured and pressed the button on the wristband.

I was immediately choked by black smoke as soon as I set foot in the village engulfed in flames. BOOM! A bomb exploded a few miles away from the village, causing even denser smoke around me. A shadow emerged from the smoke.

“Well, well, well. Look who decided to come back. Let me tell you what you’ve missed. Let’s see... I bombed kingdoms with China’s gunpowder and our machine. Thanks to you, all the land belongs to me now.” It was Wong. He said it so proudly as if destroying kingdoms and killing everyone there were a glory.

“Don’t you see, Wong? You’re supposed to help our kingdom with the machine, but you’re using it to destroy the world! You changed history! You ruined the timeline!”

“No! You were the one who changed history!”

“And I’ll reverse what I’ve done! I’ll go stop myself from building the machine with you!” I pressed the button on my wristband and waited for lights to flash behind my closed eyelids.

A series of rapid beeps from my wristband urged me to open my eyes. "TIME NOT FOUND" flashed in bright red letters on the screen. I tapped furiously on the screen, but there was no response. "No, no, no!" I muttered under my breath.

Wong chuckled, "Oh? What's that? 'Time not found'? Wow, look what you've done, little one! Who's the one who ruined the timeline now? You should never have helped me!"

The roar of raging flames intensified as more buildings were consumed. Yet through it all, Wong's maniacal laughter was carried clearly, trapping me inside an invisible cage of guilt. His words sliced through my heart, and I hadn't got a single word to say about it. He was right. I did ruin the timeline.

Violent shudders wrecked the earth. Hoarse screams rent the air with raw, primal terror. Men, women, children flung themselves to the ground, hoping to hide from what was coming. It was useless, though, wasn't it? Inevitably, the screams faded. Flesh, clothing, earth, basically all substances dissolved before my eyes into ashes aloft. Was I supposed to be scared? Was I supposed to be worried? It didn't matter. I was going to turn into ashes just like everything else on this planet sooner or later. I buried my head in my knees, patiently waiting to accept my fate.

Relentless beeps had again awakened me. I was surrounded by darkness and I was sitting on... nothing. It would've been pitch-black if it weren't for the light from my wristband.

"TIMELINE NOT FOUND"

Cold dread gripped my heart tight. Father's words echoed in my head, "You don't know what you can and can't do when you time travel! You could be injured, or worse, lost in time!"

Lost in time... What even was time? Was it something so delicate that even a stupid teenager could break easily with her foolish actions?

I chuckled under my breath. One of China's greatest inventions was misused because of me. A great history was erased because of me. An entire timeline fell into ruins because of me.

I lived evermore in complete nothingness and darkness as the dim light on my wristband faded with the light in my heart...

New tales of China's Inventions

Hong Kong Taoist Association Tang Hin Memorial Secondary School, Ho, Yi Wa – 15

Luoyao gasped.

In front of them was the renowned A-fang Palace, lost in a fiery fire thousands of years ago. The golden pillars, surrounded by splendor reliefs of dragons and phoenixes glimmering and reflected the sunlight. The wing-like rooftop was vermilion-red and lapis blue, with tiny traces of gold adorning the thousands of layers of curved tiles. Wooden carvings of ancient Chinese patterns spread all over the building, giving a sense of solemnity.

'I never thought I'd get a chance to see this.' Xulin stared with her eyes locked on the palace where ancient emperors lived. 'Me neither. Oh... do I need to keep the whole palace in a file?' Huangwen stood beside her. His eyes filled with amazement.

'Of course! The papers in this palace are priceless – make sure you saved them uncompressed.' Luoyao exclaimed, thrilled and full of joy.

Since 2040, there had not been any more research on predictions with quantum mechanics. Although scientists suggested that prediction of future based on it was highly possible to come true, the United Nations has decided future prediction to be unethical and no more research should be carried out on the subject. This had discouraged so many scientists in that field that there were protests all over the world and was dubbed 'The downfall of science development'.

Some scientists carried on, posting their work on scientific journals, and got arrested. In spite of the sentence being just a few weeks in prison, no one dared to continue. Abandoned documents were mostly lost, forever.

Eventually science found their way in outer space. Over a span of five years, untrained humans were able to go on a tour on Mars; astronauts were walking on Mercury and Venus; and unlimited diamonds could be extracted from Uranus which had led to an apocalypse of the jewelry industry.

Still, some stayed on Earth.

The small group of scientists from China, on a mission code named 'Legacy', were continuing the research on the technology about predicting future in quantum mechanics, but the other way round – to reveal history. In theory, as predicting future worked, reliving history should work the same way.

Leader of the group, Luoyao, was a pioneer in quantum mechanics, while her trustworthy teammates, Huangwen and Xulin were historians with rich experience in science. They led a whole team of 15 scientists, dedicated to recover the gems lost in the five-thousand years of Chinese history.

'Good morning.' Another day of work, Luoyao greeted her lab with a cup of coffee and continued what she was doing last night. She had been testing the apparatus with a broken plate to see if it could make a three-dimensional projection of the original plate. It had always come out strangely, like a plate with cracks or a square-shaped plate despite the plate being circular at first. She had to modify it every time and that would sum up as her job. Huangwen was a great technician and could do the actual modification on the apparatus. Xulin was almost purely an archaeologist and had been making her plan about where to go with the apparatus.

'Yes – ' A cry of joy suddenly slipped out of the lab, followed by an eager but violent opening noise of the door, Luoyao rushed out to the office where Huangwen and Xulin were still figuring out the documents, laughing like a maniac, 'The plate – it's back to normal! Come on, come and see!'

Huangwen's jaw dropped, and Xulin shot up from her seat and hugged Luoyao. 'Does it mean we could move on and make the machine do the actual work now?' Huangwen hurried behind the two overexcited girls, 'Like, rearranging the atoms and reversing the chemical reactions that had happened?' 'Probably.' Luoyao's voice lagged in the air.

The photons danced on the apparatus, creating the exact size, colour and shape of the unbroken plate. 'Even the texture lined up...' Huangwen gazed at the image. The light passed through his fingers and still displayed the plate stably.

'We must report this first. Huangwen,' Luoyao pressed her ecstasy down, 'you can start altering the design to make it work physically – remember to test everything, make sure the 3D projection works perfectly...'

Xulin was still observing the apparatus, as if she could already see herself carrying it around the ruins of ancient China, seeing the debris come back to life with a click of a button.

'Breaking news! Breaking news!' Luoyao stepped into the office with her usual extroverted and way too cheerful tone, 'the Research Institute has decided that a 3D projection is good enough. They don't want to alter anything at the historical sites. Huangwen, can you make something to save the 3D model digitally?'

'That'll be easy. Give me a few days.'

'And Xulin, you need to submit your plans to the Research Institute as soon as possible, because once Huangwen finished his work, we will start our journey to sites. Oh, by the way, all transport fees will be subsidized, so make the plan wild. I'm going to attend a press conference on behalf of our group to announce our achievement!' Luoyao winked with her speech article in her hand, and went back to the lab where she found it the coziest.

'Good afternoon, everyone! I am Luoyao. Today the Research Institute has something very delightful to announce.' As Luoyao spoke, thousands of camera lenses focused on her, flashing their lights. 'As we all know, the history of China was thousands of years long. Many gems in the history had been covered in soil. Some never saw the daylight for centuries. To reveal the actual ancient glory, our team had been on a mission code named 'Legacy'. And just now, we're proud to announce – that we have made it! We have made an apparatus that will help us bring our history alive! Our history will be right in front of our eyes! Let me introduce to you, the 'Archive', which will be going around our country, visiting numerous sites, to make history come to life! Next, Huangwen will introduce its basic mechanics.' She passed her microphone to Huangwen, and went down the stage.

'So, um, the concept is that...' Huangwen started explaining the thing while Luoyao looked at Xulin's plan. Xulin would be introducing the travelling plan to the audience, which was the highlight of the press conference.

'Uh... and I have posted the paper online. If you want to learn more, feel free to look it up. Ehm, thank you.' Huangwen walked off the stage, biting his lips and talking to himself as if he did a bad job. Giving the microphone to Xulin, he sighed with relief. He was a typical engineer who was better at handling machines than talking to people.

'Hello everyone, I am Xulin, and I am going to announce where our team will be going with the apparatus. We will follow the historical timeline, going from the Erlitou site, which is where the Xia dynasty left its mark, to the much more modern Old Summer Palace. The first operation will take place on 23rd November, which is two weeks later. For further details, please visit the Research Institute's website. Thank you.'

As Xulin finished her last line, Luoyao cheered and Huangwen smiled.

The trips were successful. At first, not many people came to see as they were busy looking at the stars through telescopes, but as Luoyao started showing the world what they had seen, more and more citizens recognized the value of history, and it successfully brought the attention of a lot of people.

'Look at this model. I can't imagine we already have these buildings four thousand years ago. Some rural areas still have this kind of houses.' The group was looking at a model of a palace in Xia. It does not look like a palace to any people in 2040, but when people realized when it was built, it was shocking. 'And also this one from Zhou dynasty! This is when the society began to have specific rules about etiquette. We have those 'Tripods', which not everyone can use. The emperor can use the most and the officer can use a few. Civilians cannot use these. They are considered a status symbol back then.' Luoyao zoomed in at a bronze container, very large and probably heavy, with rectangular patterns on the sides. Some tripods still existed as relics, old and rusty, and seeing them in the 3D projection that showed what they were like thousands of years ago was truly mind-blowing.

'Where will we go next?'

'To Xian, where the Qin Emperor buried the terracotta warriors. I would love to see what they looked like in the past.'

A year had passed since they had their first trip. Throughout the year, they collected models from Changan, Luoyang, Beijing and various places. A museum was built to store and display their findings. They were on news headlines a few times, with the most considerable event being recovering documents from A-fang Palace, which were archaeologically priceless and helped correct and fill in the known history a lot.

'So, if we simply look away from the space. I know it is a special place, with stars and loads of interesting stuff. But space is not the only fun thing. The old times, where humans had not got the technology to jump out from our planet was fascinating too. We should not forget about the history, we should learn from it, and on many occasions, we see beauty in them. Because it is where we came from. If there was no history, we would not exist. The legacy shall never be forgotten, and will never be forgotten.'

The Continuous Search and Strong Dedication of the Herbalists

Hong Kong Taoist Association Tang Hin Memorial Secondary School, Tsang, Lok Yi Cherry – 16

"Bring me the most renowned physician there is," at the order of the emperor, the officials backed down with bowed heads, scattering away and exiting the grand room.

It had been nearly two weeks since the plague spread – everyone had thought it was just the change of weather at first, but eventually the coughing got worse, and patients started dying. There had been several reports to the emperor, pressing and urging him to alert the nation, but the selfish ruler had been indifferent. Until the sickness hit home. Several of his servants started coughing violently and two of his dearest consorts had fallen ill. He had dismissed the servants, but the conditions of his dearest ones were all but well. For the next few days, his courtiers went through every prescription there was in the imperial pharmacies and mixed medicine out of the most precious ingredients – but it had been in vain. None worked.

In a city located at the Western parts of the Country lived a humble but kind doctor named Zhang Zhongjing. After years of studying and practicing, he was quite knowledgeable in various areas of medicine, eventually becoming one of the most well-known in Nanyang. Yet, there was one particular ailment he found difficult to handle – a plague.

The man had sat at his desk, a heavy sigh escaping his lips as he stared out of the window. His city had not escaped the plague either. He'd given his first patients honey-containing prescriptions, but the gentle cough erupted into a wild infectious disease later on. Families after families had fallen ill. The young man was deeply troubled.

"Master, do you require any assistance?" His apprentice walked in. "No, there is nothing tonight. You should rest early." Zhang decided that he would pay a visit to the mountains the next day to search for more herbs. He went to his herbal medicine cabinet and went over all his ingredients once again. "Perhaps the intense coughing had something to do with the dampness", he thought. An excessive accumulation of moisture or fluid in the human body could be the culprit. He would give it a try.

The young man woke up early the next day. The sky had not quite yet been lit, but he sat up, remembering his task for the day. "Gui, do you mind preparing a prescription containing a moderate dose of Bai Zhu for the appointed patient today? I will be out." He paused a bit at the door, then added: "Tell me how it goes."

The doctor decided to trek into the mountains one morning, carrying a basket on his back and setting off. A gust of chilly wind whisked past – the signs of late autumn and an approaching winter. He would be looking for a rarer herb today – the small white flowers and slender stems of the *Fang Feng*. He'd see the effect of *Bai Zhu* on the plague, and if his suspicions are proven correct, an addition to the dampness reduction whilst strengthening the immune system should have a better effect on the sickness. He tread on, pushing aside tall ferns and grass along his way. After the rain last week, he wasn't sure if the plants survived had there been flooding. It was well past noon when he finally found a small batch of them – but

as he knelt down to inspect them he knew that they had been ruined by the heavy rain. The practitioner had to return with nothing in his empty basket.

Things were not on the bright side for Zhang and his apprentice. They'd received more urgent callings and summons, families crying out to them for help as their loved ones laid in bed with terrible coughs. But they could only watch and apologize – there was no remedy.

The gloominess of the situation had been broken by good news one afternoon, as the meet-up with the previous patient who received the *Bai Zhu* prescription showed signs of improvement – a significant reduction of coughs. The doctor's heart beat with excitement and hope. The tides of this battle were finally turning.

He gave the similar prescriptions to the other patients, and he was relieved by their ease of pain. Yet the root of the cause was still not eliminated. The sickness was contained temporarily, but they weren't healing. The master and the apprentice worked overnight, mixing different remedies with different ingredients. Finally, when they added *Huang Qi*, it seemed to power-up the medicine.

Then came the day when a royal servant brought the summoning scroll to Zhang. Zhang promised the remedy, only in exchange for a supply of Fang Feng. The final cure was finally created – and the practitioner gave the remedy its name: *Yupingfeng San*. The doctor sent the prescription to the palace, and the pandemic was finally lifted from the country. Yet the time still came to say goodbye. The beloved doctor had left, with his long exposure to the virus and his sleep-deprived state of overworking being the cause of the deterioration of his own health. With that, the mother gently closed the book with a light shut.

"That's such a sad ending!" The girl cried with a fever patch on her head.

"Is that so, darling? But such is the embodiment of the great devotion of our past doctors who invented the Traditional Chinese Medicine, and with it came thousands of great prescriptions and remedies that saved millions and billions of lives. And the *Yupingfeng San* is one of them." The mother smiled gently, while faking a pointed look at the small pearl-like pills in the palms of her daughter's hand. "Story time is over. Now it's time for you to fulfill your side of the bargain." Still smiling, she gave the little girl an encouraging nod.

The child furrowed her brows as she screwed her eyes shut and swallowed the pills. "Ugh, bitter..." The girl stuck out her tongue and made a face.

The mother laughed softly, patting her child gently and staring out of the window, her gaze distant.

"Bitter it is, as it is the continuous search and strong dedication of the herbalists, my dear."

The Golden Era of Innovation

The bright moon rose, ushering in a starry night sky where millions of stars twinkled with light, mischievously squinted, and scattered around. Sofia was lying on the bed with an electric helmet covering her head, silently enjoying this peaceful, tranquil night while imagining the upcoming encounter in her dream. Soon after that, the night's aroma pervaded the air, woven into a soft net, covering all the scenery inside.

She gradually fell asleep.

For decades, humans had been putting considerable effort into revealing the secret of the human brain. Now, they were able to make a digital mind copy and upload their consciousness into the metaverse with the help of a helmet. For Sofia, it felt like dreaming but she got to choose the dream she wanted, a dream in which she could gain novel, extraordinary experiences that were impossible and verged on the insane in the real world.

The metaverse Sofia stepped into was awe-inspiring and unexpected.

There were floating cities where buildings hovered above the water, creating a mesmerizing sight. Around these cities, lots of innovative structures were designed to blend seamlessly with the surrounding environment as if they combined to form a harmonious masterpiece. Looking down, schools of fish swam gracefully in the canals under the futuristic cities, adding a touch of natural beauty.

"Imagine soaring over the buildings and encountering vibrant ecosystems, how wonderful that would be....." Sofia was muttering to herself when a voice called her from a far distance.

"Sofia! Hi there!"

Wrenching her gaze from the sky, she was surprised to find her friend, Lucy, standing on a hoverboard and coming towards her.

"Hi, Lucy!" Sofia yelled with a flare of joy, "Never thought to meet you here, in..... in the metaverse!"

"Neither did I," Lucy giggled, a charming smile rippled across her face, "so you're having a go with mind uploading too."

"Yeah! I've never been here before." Sofia replied in high spirits, her heart was pounding.

"I'll show you around then! I guarantee the metaverse will knock your socks off." Lucy squealed with delight.

Shortly afterwards, they slipped through the doorway behind them and down a narrow path. Where the path began its descent, the two ramblers were greeted with the fragrance of flowers and herbs lingering around, for the way now led steeply and directly to the mysterious underground woodland.

"Here we are in front of the woodland. Sofia, ready for the adventure?" Lucy whispered in a low voice.

"Definitely! But.....what could happen in a small woodland?" Sofia was baffled.

Lucy let out a chuckle and sauntered at a jaunty pace through the wood where the earth was spongy and squishy. As she walked, bushy herbs caressed her arms and sunlight trickled through the green leaves. Slowly and unwittingly, they were cloaked in mist. Through the mist, Sofia could merely see that they were wandering into a tall forest where the trees were by no means ordinary. Their trunks were slender and greenish, and when she looked up to find branches, she saw instead several flat yellowish-pink canopies spreading from the top of the trunk in an elegant manner.

"Wait.....What..... What is that?" Sofia stuttered as her mouth was wide open in awe.

"Have a guess, then." Lucy giggled and waited for a second.

"They are wildflowers!" yelled Lucy with a sense of mischief.

"Wildflowers? That's insane....." Sofia was glued to the spot, staring at the giant creature in blank astonishment.

"Exactly! That is the charm of mind uploading. You are sure to find something awe-inspiring and amazing through your adventure! Just enjoy."

At that instant, a playful breeze danced through the wood, making the mist dissipate and giant flowers sway as if they were performing a delicate ballet. Countless golden pollen then soared high to the sky, enlivening the cheerful, pleasant atmosphere. Sofia stood still in the bush, enchanted by this mysterious wood, funny, weird, and peculiar. As she watched the metaverse around her, it felt as though nature itself had come alive thanks to technology, telling stories and painting pictures with its sights and sounds, and she was just a witness to its wonder.

It was not until a thick fog enveloped Sofia and Lucy again that they were aware of the significant change in the surroundings. Sofia blinked, then blinked again. In front of her was a range of mountains with volcanoes bubbling deep beneath them. Surrounding the volcano on one side were the barren red sands while on the other side was black ground covered in ash. Above them, the sun blazed in the sky and cast its golden rays as if it were a fiery

dragon spraying fire everywhere it touched. Vultures were also wheeling over the sharp peak, creating an exceptionally eerie and spooky ambience.

“Wow, Lucy, these volcanoes make the legendary red fiery glare! I’ve always wanted to see it but never got the chance.” Sofia gasped in admiration. She couldn’t believe her eyes.

“Told you, this is every inch a mind-blowing experience,” Lucy exclaimed, “and there is much more to explore in the digital utopia than just a woodland roam and volcano trip.”

Sofia and Lucy looked at each other and burst into laughter.

“Oops! It seems that time is up and I have to return to the real world.” Sofia felt a signal from her helmet reminding her that it was already dawn.

“Oh yeah! It’s so nice to meet you here today. See you at school then!” Lucy replied with joy.

A thick white fog swirled around Sofia and the metaverse began to shimmer around her. Gradually, Lucy’s silhouette disappeared as everything dissolved into——

—— the real world.

The morning mists lay below skyscrapers in bands of white and grey. As the sun rose, they changed into bubbling seas of red and gold, churned out and let the low rays stripe the roof of Sofia’s house. On opening her eyes, Sofia saw a golden ray of sunshine stream in through the skylight onto her bed, illuminating the entire bedroom with a warm glow. She watched the mist subside with a smile of pure joy on her face, as she knew, endless state-of-the-art inventions would pop up to make the impossible possible. As society is set to explore and innovate, mind uploading would just be the starting point.

Our brand-new life was coming.

Threads of the Earth's Song

Po Leung Kuk Choi Kai Yau School, Shen, Bob Rulilin – 16

The autumn air in Hong Kong was brisk, carrying a symphony of rustling leaves – a cascade of red and gold waltzing against the city’s steel-grey skyline. Inside a lab that buzzed with the quiet intensity of anticipation, Dr. Tan Mei stood, her eyes reflecting the ghostly glow of computer screens. Around her, the skeletal framework of her prototype—a promise of safety against nature’s caprice—hummed with potential. Despite the advanced algorithms flickering across the monitors, a gnawing gap remained, a piece of the puzzle stubbornly elusive as if it lay beyond the reach of modern technology.

The lab was her haven, a place where the whisper of an idea could grow into a roar of innovation. Yet, tonight, Mei felt the weight of solitude in her quest, a familiar echo in the vastness of her ambition. She was a maestro conducting an orchestra of data and circuits, but the harmony was incomplete.

In search of solace, she found herself drawn to the warmth of her grandfather’s study, a room where time seemed to stand still amidst the shelves laden with ancient tomes and artifacts. It was here, under the watchful eye of a jade dragon that had silently observed generations of her family, that she sought a moment of respite.

As Mei ran her fingers over the leather-bound spines, one book drew her in, its cover worn by decades of scholarly hands. It wasn’t research that called to her tonight but a need for connection, a whisper of the past to guide her in the present. Slowly, she withdrew the volume, a cloud of dust motes dancing in the lamplight, and settled into the embrace of her grandfather’s old armchair.

A parchment, brittle with age, slipped from between the pages, floating to the floor with a grace that belied its years. Mei picked it up with reverence, her pulse quickening as she unfolded it to reveal a poem in classical Chinese script. Her breath caught—the author was Zhang Heng, known to her as the inventor of the first seismoscope, not as a poet. Yet here, in her hands, was a piece of his soul.

The poem read:

*In the dragon's core, where secrets are kept,
In silence, it guards; in darkness, it slept.
Metal's embrace and jade's whispered lore,
Together they listen—earth's heart at the core.*

*A sphere gently stirs, an omen foretold,
In the dance of the deep, where futures unfold.
A sentinel's duty, cast in ancient light,
To watch over the living, through day and through night.*

The characters, elegant and sure, spoke of the earth's heartbeat, of a unity between the heavens and the human spirit. Dr. Tan Mei, with her life's work laid out in silicon and code, felt a sudden kinship with this ancient scholar. Zhang Heng's quest was her own: to understand the earth's most intimate whispers before they turned into roars of calamity.

As the night deepened around her, the poem offered not just historical insight but a reflection of her own yearning—to protect, to serve, to connect with the tremulous song of the earth. In the quietude of her grandfather's study, surrounded by the wisdom of ages, Dr. Tan Mei found the silent melody of inspiration calling to her once more.

Pause, to go further

Weeks melded into an indistinguishable blur as Mei delved deeper into the poem's mysteries. The ancient script was a labyrinth of symbolism, each character a riddle wrapped in the enigma of antiquity. The translations she had at her disposal felt hollow, stripped of the poem's soulful essence. Her breakthrough danced just beyond reach, a shadow flickering at the edge of understanding, and her frustration grew like a storm on the horizon.

The lab, once a crucible of innovation, had become a prison of dead ends. In a rare moment of surrender to her human limits, Mei stepped away from the relentless pursuit. The streets of Hong Kong called to her, their vibrant pulse a stark contrast to the sterile hum of her technological haven.

As if guided by the unseen hand of fate, she found herself navigating the labyrinth of a local flea market. Here, the past and present coexisted; every trinket and relic whispered stories of bygone eras. The air was thick with the scent of aged paper and history, a perfume that settled into her senses, offering an odd comfort.

It was amid this cacophony of the forgotten that she stumbled upon a relic that seemed to hum with significance. An old scroll, nestled between jade figurines and brass compasses, called to her with an almost magnetic pull.

The stall owner, his eyes crinkled with the wisdom of years, watched her with a knowing smile. "It belonged to a scholar, many centuries ago. He was a dreamer, an inventor, and a poet," he said, his voice a bridge to the past.

With hands that trembled with reverence and possibility, Mei unfurled the scroll. The script within was delicate, the ink faded but the words alive, dancing before her as if imbued with the very breath of the ages. And then, a name leapt from the page to imprint itself upon her heart: Zhang Heng. This was no mere historical artifact; it was a fragment of the seismologist poet's soul, a continuation of the poem that had become her obsession.

Spring, 86 AD – Birth

The gentle whisper of Xi'e's winds, entwined with the rustle of bamboo, has often been my companion, as familiar as the shade of the ancient banyan under which I sit. Here, amidst the symphony of the natural world, my thoughts find their rhythm, harmonizing with the lifeblood of the earth itself.

Today, as I pondered the silent dance of the earth, my father approached. I saw in his eyes the reflection of the azure sky and a curiosity that mirrored my own. "The earth speaks in a language few can hear," he mused, recalling the words of the scholars and poets he so often read to me during the long evenings.

"I wish to understand that language," I replied, the thought taking root in my heart. "To anticipate its silent turns and to know its gentlest murmurs."

In the quiet that followed, a vision began to unfold within me—a dream not just of comprehension but of creation. A dream where the whispers of the earth could be translated for all to hear. It was here, in the embrace of the banyan's ancient wisdom, that the seed of my life's work was planted.

The sun dipped low, casting long shadows across the land of my birth. In the twilight, I knew that my journey had begun, as a seeker of the earth's hidden songs. This day marked not just the passage of another season but the awakening of the dreamer within, the birth of one who would listen to the earth with a scholar's mind and a poet's heart.

Autumn, 89 AD – Mission

A day like any other was torn asunder by the earth's lament, a roar so profound it seemed to come from the very depths of creation. The land heaved in sorrow, and the pillars of our human endeavors crumbled like the fleeting dreams they were. The air was thick with dust and despair, as cries of the afflicted rose to the heavens.

My father stood beside me, his composure a fragile bulwark against the chaos. "An earthquake," he whispered, the words barely a ripple in the torrent of nature's outpouring. "The earth's formidable voice speaks."

Those words struck a chord deep within my soul, not merely as a son but as a member of this trembling society. I saw the fear etched on the faces around us, the helplessness that gripped tight at every heart, and felt it echo in my own.

Yet, amidst the wreckage, where lives had been unmoored and the illusion of control lay shattered, a resolute flame was kindled in my spirit. "Father," I found myself saying, "what if we could come to understand this fearsome language? To not merely endure but to anticipate, to prepare?"

The days that followed were filled with reflection as I wandered amid the ruins, my heart heavy with the suffering etched into the very earth. The people of Xi'e, with hands calloused and spirits tested, set about rebuilding, their resilience a testament to the enduring human spirit.

It was in the quiet moments, sitting amidst the remnants of our fragility, that my true mission took root. It was not enough to stand in awe of nature's might; I was compelled to stand in service to humanity. To turn this devastation into a wellspring of knowledge that might one day spare my fellow beings from the grip of such sudden ruin.

The earthquake, a formidable beast that had shaken us to our core, became more than a harbinger of destruction. It was a clarion call to action, to seek out the secrets held close by the earth, and to forge from this calamity a beacon of hope.

In the annals of time, let it be said that from the ruins of Xi'e, a mission was born—a mission of compassion, of understanding, and of an unyielding commitment to safeguard the dance of life upon this unpredictable stage.

Winter, 92 AD – Enlightenment

The winter's embrace had stilled Xi'e, the land lying in repose as if to recover from the season's earlier tumult. The remnants of the earthquake were like scars upon the earth, covered in a shroud of snow, whispering memories of the upheaval.

One evening, as a minor tremor coursed through our village, a subtle but unmistakable reminder of the earth's unrest, my mother's voice found me. I saw her silhouette against the hearth, the dance of the flames casting a tableau of the past year's chaos on the walls of our home.

"Heng," she said, a tremble in her voice mirroring the tremor that had just passed, "the earth's dance was violent. Must we always live in fear of its next step?"

Her question hung in the air, mingling with the scent of burning cedarwood. "We are not powerless, Mother," I replied, the idea crystallizing like ice upon a branch. "We may not command the earth's movements, but we can strive to understand its signals, its patterns. In knowledge, there is forewarning."

A spark of something akin to hope flickered in her eyes, a fragile flame against the encroaching darkness of doubt. "Is such a thing within our grasp, Heng?" she asked, her words carrying the weight of a community still reeling from nature's blow.

My response came from a place of deep conviction, fuelled by the unspoken resolve that had taken root within me. "I believe so," I affirmed. "The pursuit of knowledge is itself a lantern in the dark. I will seek out this understanding, Mother, not just as a balm for our fears but as a beacon for all."

As the winter deepened, so too did my commitment. I immersed myself in study, surrounded by scrolls and texts, the voices of ancient scholars and my companions in the quietude. The dreamer in me, once content with mere reflection, now sought the mantle of a scholar. It was a path lined with the unknown, but I stepped forward with a heart fortified by purpose. The earthquake had been a harbinger of destruction; now, it was to become a catalyst for enlightenment.

Spring, 102 AD – Struggle

In the stillness of the library, where the dust motes danced like silent specters in the shafts of light, I found myself besieged by a sea of ancient texts. Each one was a beacon that had guided me here, to Luoyang, away from the nurturing boughs of Xi'e's banyan and into the heart of the empire's grandeur—a memory that flickered like a candle in the recesses of my mind.

I recalled the morning of my departure, now five years ago, the firm grip of my father's hand on my shoulder, a silent bastion against the uncertainty of the path I had chosen. "Seek the knowledge that eludes us," his voice had echoed, a mantra that now resonated in every beat of my heart.

The capital had been a crucible of sounds and sights, a maelstrom of life where every face held a story, every story a lesson. My tutor's words whispered to me across the years, a gentle reminder that wisdom was not solely the province of the scholar, but of every soul that walked the thoroughfares of Chang'an.

Yet now, as I faced the scholars of this esteemed city, their skepticism was a gale that threatened to extinguish the flame I had carried all this way. "A seismoscope?" they would murmur among themselves, the word tinged with irony. "Young Heng chases shadows."

But shadows were merely a sign that light was present, and it was this light that I sought—relentlessly, resolutely. Each dismissal, each patronizing glance, I stored away not as tokens of defeat, but as the chaff which would eventually separate from the wheat of triumph.

As the chill of winter seeped into the bones of the library, I felt the weight of all I had left behind—the comfort of my mother's embrace, the steadfastness of my father's belief, the serene beauty of my hometown. These were the talismans I clung to in moments of doubt, each a reminder of the dream that had set me upon this journey.

In the solitude of my struggle, I was a solitary figure etching out a new path—one that others could not yet see. But with each stroke of my brush, each line of inquiry I pursued, the path cleared, leading me ever onwards. For in the heart of this struggle lay not just the promise of enlightenment, but the hope of a future where the earth's violent dance could be anticipated, and the lives of those like the citizens of Xi'e could be spared from nature's fury.

Autumn, 105 AD – Success!

The workshop was silent save for the scraping of metal on metal, the soft flutter of parchment, and my steady breaths—each one a quiet testament to years of relentless pursuit. Before me lay the culmination of a journey that had spanned the breadth of this vast empire, a device wrought from copper and ingenuity, poised on the edge of awakening.

I recalled the disdainful smirks of my peers, the weighty expectation in my father's eyes, the gentle encouragement of my mother's touch—all distant now, as I stood on the precipice of revelation.

The first tremor was subtle, a whisper of movement that might have been dismissed by any other. But to me, it was as thunderous as the roar that once shattered the tranquility of Xi'e. The seismoscope, my silent sentinel, responded. The dragon within stirred, its metal heart resonating with the earth's hidden dance.

In that moment, time was a river stopped at its source. The sphere within the dragon's grasp shifted, rolling with purposeful grace to point its accusing finger toward the west. My heart thundered in my chest, a counterpart to the silent song of the earth that only I, in that instant, could hear.

When the confirmation came—a messenger, breathless and wide-eyed, speaking of tremors felt in the distant regions—it was not just validation for me, but a vindication for all who dare to dream beyond the veil of the known.

The scholars' eyes, once narrow with skepticism, now widened with the dawning of understanding. Their murmurs, once derisive, turned to contemplations of the implications of my work. I felt not triumph in their capitulation, but a serene affirmation of the mission that had chosen me as much as I had chosen it.

Understanding

In the silence of her lab, Dr. Tan Mei held the scroll delicately between her fingers, as if the fragile paper was a bridge across time, connecting her to Zhang Heng—a man whose ancient dreams now whispered to her across the centuries.

She had been captivated by the narrative of his life, the meticulous detail he poured into his work, and the poetic depth of his aspirations. His words, though from a distant past, held a resonance that was profoundly personal and immediate. In the dance of his calligraphy, she found echoes of her own heartbeat, her own dreams.

The fusion of Zhang Heng's lyrical legacy with the stark functionality of her modern research lab created a harmony of purpose. The heart of the dragon—the core of the earth which he had sought to understand—now beat in sync with the pulse of her seismic warning system. Mei saw not just the spirit of metal and the breath of jade as materials, but as metaphors for the resilience and adaptability required to face nature's might.

As she read, the seams of the past unwound, revealing the timeless pattern of human ingenuity. Mei's vision for her seismic warning system crystallized further, inspired by the balance Zhang Heng had struck between strength and flexibility, tradition and innovation.

With every line of Zhang Heng's diary, Mei felt the walls between their worlds thinning. Mei's work, once confined to algorithms and data, now took on a new dimension—it was a narrative, a story of humanity's resilience and the enduring quest to protect life. Zhang Heng had reached across the ages to remind her that at the heart of all technology, all discovery, were the lives of the people it served.

In the soft glow of her monitors, Dr. Tan Mei no longer felt alone in her quest. She was part of a continuum, a lineage of dreamers and doers who listened to the earth's rhythms and sought to harmonize with them. Her hands, steady and sure, resumed their work with a renewed sense of purpose. For in her heart now danced the spirit of Zhang Heng, and together, they were composing the future's song—one of hope, protection, and the unending dialogue between humanity and the earth.

The Embers We Leave Behind

Po Leung Kuk Choi Kai Yau School, Tong, Carrinna, 15

“And this goes here...”, Shih placed a matchstick next to a splintered piece of rope, the glow from the flames illuminating the unabashed pride on his face.

“There. Now, we run and hide behind that rock.” Pointing a finger to a large boulder obscured by night’s shadow, Shih smiled at Jing and grabbed her hand. They turned and crossed a thin flowing stream and hopped over pebbles, towards the faint flickering yellow aura from their home’s candlelight. The child waddled over the little bits of rock, tripping from time to time but never falling, always pulled upright by the big, warm hands she could unwaveringly trust.

Crouching behind the boulder, they waited. Giddy giggles bounced off the rock and the wooden planks of the house, obscuring the crackling of flames that burned closer and closer to the device...

Bang! Bright streams of light shot up from the mist and the night sky erupted into clouds of confetti.

Jing jumped, leaning back into his father’s torso. Shih wrapped his arms around her and hugged her close: they looked at each other, smiled, and directed their gaze to the night sky. Incandescent eruptions painted the darkness with streaks of fuschia, gold, ruby, and emerald. The air shook in the fire’s ebullience as the fiery torrents soared upwards, erupted, and flared; only then fading into a trail of fizzling smoke.

Shih’s face changed tinge with each crackling explosion, his eyes reflecting the dazzling spectacle of his own creation— he had harnessed the power of nature and turned it into something nothing short of magical.

This was an inadvertent discovery, yes, a trivial side-product of his grand quest for scientific research and seeking the key to immortality. Yet, it was impossible to ignore the vibrant sparks that emanated from the powder when heated.

Sure enough, word, and sound, of this explosive spectacle spread across the Kingdom and bursts of colour were soon seen all across the night sky. Eventually, flowers and dragons were painted right above the grand palace.

"Shih..." the emperor voiced:

"I am at a loss for words. This is an amazing invention, and we are proud to see such scientific progress in our land. We are truly amazed by these scintillating images. Thank you for giving me such an extravagant display on the day of my birth, it is such a symbol of prosperity and glory."

Prosperity and glory. Shih's heart pounded at these high-flown praises: years of experimentation and dedication to scientific research, finally culminating in recognition, finally enabling him to create something of use, something that leaves a mark on society: even if it just brings the most minute amounts of peace and joy. Finally –

"Shih, could you provide us with, say, ten boxes of these, ‘sky flowers’, five days later? Any colour would suffice. The nation would benefit very much from this."

Shih did not appreciate this: ten boxes in five days, whilst he was the sole producer? Let alone giving away his own invention for no profit, no fame, no elevation in status, just for altruistic self-motivation? This did not sound appealing— not to any rational person. But it was the solemn tone that made this question a demand: this was the country, the government, the highest power. Shih could do nothing but oblige.

Five days have passed since Shih reluctantly handed over days and nights of hard work to the emperor: ten wooden boxes, carefully sealed off, full of hand-crafted powder that became magic when ignited.

Three days have passed since the Huang Chao rebellion took a turn for the worse and civilians became harmed amidst the violence.

Crouching behind the boulder, they hid. Rapid and muted breathing concealed itself from behind the rock whilst shouts of violence echoed all over the village, obscuring the crackling of flames that burned closer and closer to the device...

Bang! Bright balls of a blinding glow shot up from the trenches and the air erupted into another wave of raucous screaming.

Jing jumped, leaning back into his father's torso. Shih wrapped his arms around her and hugged her close.

"It's fine. It's fine. We will be fine, Jing... We just... We just need to run from this boulder, back into the house", Shih reassured.

We will be fine. This time, Shih did not let Jing run across the pebbles herself. He hoisted Jing onto his shoulder, and, finding the moment, sprinted towards the wooden plank door and flung it open.

We will be fine. Shih put Jing down on the floor, his eyes glazing over the stained wooden table and the flasks of chemicals perched innocently on the shelf above. A bottle of crimson lay at the edge. As if possessed by a demon, Shih walked over, staring at that bottle of red.

Will we be fine? The sound of this explosive was too familiar to suggest otherwise. The fizzling. The bangs.

The bottle falls over the ledge, shattering into a pool of crimson that begins to seep into the irregular wooden grains.

Shih's breathing became heavier: so did his heart. This wasn't his intention. He had hoped to bring joy and hope. This spectacle was a happy accident from his endeavours of science, of extending life. Yet, it had become the opposite: terror and bloodshed; abruptly ending the lives of breathing souls, tearing bodies into bits of flesh, only for it to splatter anonymously onto the already blood-washed ground. If life is so vulnerable, what is the purpose of trying to extend it?

Red drips off the edge of the table onto the floor, the striking hue starting to spread to its surroundings like a symbiote, staining the chair the floor the air, Red.

In his pursuit of Science, Shih did not ever stop to think about what Science is: all he had was his passion for it, his wish to leave a legacy behind. But as realisation came crashing down, Shih saw a part of Science that he so carelessly neglected, concealed by his relentless acceleration that left no room for contemplation of consequences. He had neglected the duality and the power of Science, and how dangerous this could be, when Science lands in the wrong hands.

This was not the legacy he wanted to leave behind... But it was already too late to salvage.

The Red had already spread uncontrollably, colouring the entire room in a monochrome red.

Jing stared at the back of Shih's head, now buried within his arms and rapidly heaving up and down.

Perhaps in an attempt to cheer him up, she asked in a weakly cheerful tone, "Daddy, are they all playing with our sky flowers outside? Can I join them? We haven't played in so long, pleeeeeease?"

Join them? Join them and face death? Face the wrath of fire; the scorch of my own science?

The red grows, becoming more and more viscous... Until it starts to climb up Shih's feet, suffocating the Scientist...

Shih is in a barren land. He turns around, turns back, eyes desperately searching for his eight-year-old, searching, searching...

“Jing?”

“Jing!”

All he hears are echoes, voices that sneer and scorn at him when he realises that these sounds are from nothing but the manifestation of emptiness, not Jing.

“Jing?”

Shih starts to run, the dried, wilted grass crunching under every step he takes. He spins his head around, to the left, to the right, up, and down, catching sight of their bare skin patched with splatters of red and brown, catching sight of them, covered with shrivelled up pieces of guts— intestines, livers, brains.

He tries to avoid them, but there are far too many. Clusters of them everywhere.

“Jing?”

Silence. Then a meek, struggling noise that somewhat resembles: “Dad—”

“Jing!”

Yet, relief instantaneously turns into terror. Jing's previously unblemished skin is covered with cuts and slashes and blood... As her eyes begin to droop.

Shih drops to his knees, scrambling for Jing's hands, shaking them vigorously.

“Jing— No, no no, stay with me!”

Jing lets out a faint mumble, a muffled sound, as her eyes close into a silent surrender.

Bang! The world flashes white.

“Mister Shih, I am here by the name of the emperor. He demands to see you at the grand palace.”

Shih turned around, oblivious to his surroundings. His head pounded as he was pulled back into reality.

My daughter could die from this.

“Mr Shih, I am here by the name of the emperor. He demands to see you at the grand palace.” The guard enunciated every syllable.

She could die from Science.

Closing his eyes and shaking his head to bring himself back to the present, Shih mumbled, “Uhh.. Sorry, I didn’t catch that. You said?” He struggled and crawled up from the ground, wiping away the tears on his face.

Why is this happening?

“The emperor demands to see you. Follow me.”

Timidly, Shih traced the steps of the guard. The cold man’s face was masked by the shadows of the towering palace, making it impossible for Shih to discern his true intentions.

The Emperor exclaimed once he saw Shih step foot into the uncannily barren palace, “Ahh, Shih. How much you have done for our country. I would like to thank you for your generous supply of sky flowers. It has been of great use: just *look* at how many battles we’ve won.”

Furrowing his eyebrows at Shih, who was silently looking down at the marble floor, so sterile it reflected his troubled face, the Emperor said nonchalantly, “You look dishevelled: has life treated you harshly? I hope you haven’t been bothered by the war. We could provide you with accommodation... If you require it.”

Shih looked up and stared blankly at the Emperor, the glint from his eyes gone: “Oh – No, no. I’m alright. Thank you for the... appreciation.”

“That is good to hear. Anyway, Shih, I understand how hard it can be to deal with science. I know there is a lack of funding, recognition and whatnot: so perhaps, it would be beneficial for both of us if you gave us the list of ingredients that are needed to make this sky flower. We can help you scale up your production, increase exposure... Whilst we, we... Could go on to win so many battles! Don’t you love this win – win situation?”

Shih took a deep breath. “I’m sorry... As much as I love science, I do not support our country’s use of violence. What my sky flowers have turned into wasn’t my intention and has caused much inconvenience, which is why I will have to say – ”

“Naïve morals don’t work in real life.” The Emperor’s voice seemed to lose some of its pompous undertone and morphed into a deep, unembellished rasp, “It is never this simple: sometimes, violence is justified. Violence is justified because *we* are not the ones who started it. Do you think we are going to condone this trampling of our land, this massacre of our citizens, this violation of the inherent rights we possess? *Sacrifices* have to be made. Those barbarian outsiders instigated this: we are merely defending our homeland. You call *this* unjustified?”

“I think I’ll have to refuse this time, your honour.”

The emperor’s eyes darkened into a menace. He glanced around the room as if searching for evidence that something had collapsed from the marble ceiling, something he had never thought would collapse. But the heavens did not give him an answer: so he gave himself one:

“If you say so... Death it is.”

A man, apprehensive, turned to the indignant emperor and said, “Your honour, are you sure you would like to kill him? The dead do not speak words.”

The Emperor whispered menacingly, “Insolent and insensible youth! Do you not see? Since he does not comply, just *kill* him. He is merely a pawn: it’s the ingredient list that matters. We will search his workshop afterwards.”

His eyes were now clouded by a dark grey murk.

Farewell presents itself in the most unlikely corners: partings that would be unknowingly permanent. This parting, for the innocent child, is one concealed with forced smiles and haphazard excuses.

A soldier, more than a head taller than Shih, very roughly escorted him back to the once safe home, walking past them, the bloodshed, the screams... to allow Shih one last exchange with his daughter, as requested.

“Peasant, go spend time with your *precious*: be quick. Don’t you *dare* touch anything on your table. I’ll be watching.”

Shih crouched down and grabbed those small and soft hands, as he smiled and whispered, “Hey, Jing...”

“Papa and this uncle are on our way to find a new workshop for us to make... prettier sky flowers. You know, make more sky flowers for you...”

Had Jing been any older, she would have picked up on the carelessly constructed optimism Shih tried to display.

“Hooray, Papa!” Jing cheered; it was always her contagious smile that melted Shih’s heart.

“Shh... Well, mind helping me clean up our current workshop after Papa and the uncle leave? Just... dump all the things into the river. Don’t burn it, you’ll hurt yourself.”

“Okay, Dad! See you soon. Love you!” This time, her smile melted Shih’s heart into a puddle of blood, Red.

Shih turned away, unable to look straight into those innocent eyes.

“I love you too, Jing.”

Standing upright again, Shih backed away from his daughter and looked around, desperate to capture the last frames of his quaint workshop, eyes squinting from the flasks of chemicals to the stained table and to Jing...

Until the guard scuffled Shih away from it all. He turned and allowed the lone drop of tear to fall from his eyes, as they walked away

Forever.

The cold iron bars of prison contain the physical body but cannot prevent the spirit from hearing the strident sounds of the gunfire and explosions from outside. Shih’s eyes are closed, contemplating...

In what ways does he deserve this sense of security whilst people were out there suffering from his Science?

It is as if he is looking through a window, and finds that he is locked outside: so much he wants to do, but so little time and so little power...

Shih finally opens his eyes: they are filled with an unearthly glare.

The next morning, there was no sun. Blue–black rain clouds loomed over the land as the guards escorted Shih from his cell to the execution grounds, tying him firmly to a boulder with splintered, coarse pieces of rope, as other hostile guards roughly threw hay around his legs. Shih watched the growing pile of tinder and the pieces of cotton rope: how often had similar piles fueled his firework displays?

As the torch was let down to ignite the mound, Shih breathed deeply of the smoke that so uncannily resembled the smell of fireworks. How he wished he could see the evanescent glory blossoming across the heavens one final time...

Yet, he had one more task. One last thing to do, one last mark to leave on humanity, voluntarily. Bending his wrist, he tugged on a pale yellow piece of paper: on it were priceless notes, words that unlocked a new realm of chemistry, lines that would otherwise have been the birth of death.

Closing his eyes, he let it go. The piece of paper drifted down, to the left, then right, left, right; ultimately touching the flames, its edges turning immediately into a dark, muted brown, shrivelling involuntarily, as it became smaller, smaller, smaller... Finally becoming embers that were soon consumed by the wrath of the fire.

While the flames became bigger, bigger, bigger. As the blazing red–orange closed in, so did science, lamenting the loss of a passionate soul. So did the ire of war, wailing for the loss of a could–be victim. And, as the flames crawled onto Shih's skin, he regained a long–gone sense of comfort and resolve. The fire was devouring his body, but with that, it was alleviating his guilt.

I couldn't decide how my legacy started, but at least, I can decide how it ends. I've obliterated the only chance for the gunpowder to be produced: and so it ends, with me.

A small sacrifice for so much more...

Least, Shih would never live to see the day, where another brilliant mind would tread his path again, pushing himself into the depths of suffering.

Smell of Tea

Shanghai High School International Division, Chan, Chloe – 15

The smell of tea twines my heart to a temple. The world around me spinning with delight, the deep resonance of church bells makes me shiver. I walk around the dusty abandoned church, observing the obsolete pillar that had once been encompassed by people's prayers, its soul has gone dormant for long, not one being remembered to come and visit. Only left is the slim, gray cat that wanders along the church accompanying the pillar. They share their minds of loneliness and void. They see no light in life, but the continuous darkness that leads them to death. The flowers out the church all withered, drooping down their backs, with no strength to stand. They compel for whom that stands the longest, the one that is last conquered by the wind. The cat gives out a low cry or whimpers once in a while as if to add some pleasure for the church and its "old friend". The old voice of the pillar echoes in my mind, greeting me with its hoarse trembling voice. A cool, light breathed swiftly away from my body, washing away the anxiety and pain, bringing a wisp of chill across my spine, and making me feel as if I was holy and alone in a world nobody knew. The wind whirled curling up the dead dry leaves. The echoes of bells brought me back to the present.

Invention Copyright

Shanghai High School International Division, Chen, Pete – 15

At the time during which I was born, our town of Feng-Xian had much to believe in but little to know. We had faith in a number of people and things: Mr. Marx, that white-bearded fellow who thought everybody could have something; Mr. Mao, who believed China would stand up against its enemies and become strong; the “revolution” changes that put the thoughts of Mr. Marx and Mr. Mao together, that everybody would have something which would make them strong over the people who were excessively strong.

As for knowing, Feng-Xian resorted to its village teacher Mr. Li Kai-Ming. He taught us—children and adults and the elderly altogether—all he knew, which was pretty much all we needed to know.

I always stayed at his house longer than anybody else as my parents, for some reason, wanted me to know what I needed to know as soon as possible. Mr. Li understood and gave answers to all of my possible curiosities, fortunately. He treated me like his own son sometimes, feeding me snacks and wise sayings he “picked up over the years”.

I remember only one of them, the one Mr. Li gave me on a windy afternoon in early March, whilst the gales and zephyrs each played their noisy little tunes on his flimsy roof. We were just delving into the specifics of how rice was sown when he cut in, a touch more melancholy than usual:

“Bo-Si, I want you to remember this,” somberly looking into my ponderous eyes, he said, “*knowledge is priceless*. No one can buy or sell it because it can’t be marked with a price, you know that? It is the most—” I forgot the rest.

Since that afternoon, I never saw Mr. Li again. Feng-Xian began to morph, slowly yet inevitably, like a cicada stepping out golden and gilded from shedding its old shell only to shrivel and embrown to go on shedding again and again. First came the Anti-over-owning, who equalized the amount of property all over the country and our countryside. Next followed the Distributors, and so all of the households in Feng-Xian would have neither more or less proportioned shares of rice and sustenance, block houses scaled to the head count of their families, and one huge black metal bowl that was to be a pot. Then came the Anti-over-knowing, and my parents threw out all of the texts in the house. And then there were the Educators, then the Managers, then the Supervisors...there were too many groups that came in, too many shells to shed.

I yearned to write to Mr. Li by the time the Anti-over-knowing came, but my family could not access mail—nobody could, and there wasn’t even any of it around. I couldn’t ask my friends to carry messages to him either as no one was really allowed to move around a lot unless some sort of authority told them they could do so.

How could one teleport messages from one place to another? My first thought was to use pigeons, but I abandoned the idea considering that most of them were being cooked for stew.

What if I used something like a pigeon, just that it had no weight, no sound, and was invisible?

I could build an emitter and a receiver, each tuned to process only this one type of light which, as Mr. Li said, “made waves in the air too wide to be seen”. With a code that matched each sequence of flashes to a letter or a number, I could break down my messages and transfer them in “packets” from the emitter to the receiver character by character. Whoever was at the receiver could then take all of these “packets” and piece them back into my message—if Mr. Li and I each had both an emitter and receiver, we could even talk to each other back and forth! The light would be my pigeon, only that it went much faster than a real one and carried messages bit by bit.

But if we all had an emitter and receiver, wouldn’t everybody be able to deliver and receive things to and from everybody else? That would be interesting, yet could I centralize all of people’s ideas into one place? Perhaps I could build an intangible cloud with all of my zipping “light pigeons” that held everything that people needed to know (like Mr. Li’s knowledge), and it could send responses to people who sent it messages that contained their questions. Everybody would have a *net* of other people to talk to and things to know from my cloud, and collectively naming their interconnected nets would be—the *internet!*

Although exultant at this idea, I was well aware that I had done physically nothing except for annexing a to-be-used word into the Chinese language. Thus, I took my time over ten years while Feng-Xian shed its many shells to record my work by carving diagrams and rudimentary explanations into a humble oakwood chair given to my

family by the Distributors. Names and terms sprang out of my juvenile mind over the years, like “World Wide Web”, “HyperText Transfer Protocol Secure”, and “HyperText Markup Language”. I never knew what they meant; it was simply my fancy at that age to put big words together.

My initial wish to talk to Mr. Li gradually faded away under the overruling of my “internet innovations”. I did hear one of the Anti-over-knowing gleefully claim he “went down to the fields”, though...he was probably as happy as I was to know that Mr. Li Kaiming became one with the one and only working class of the new society.

By the time the ten years passed, Feng-Xian, at the edge of what was something like Shanghai, stood as a town glimmering from reformation, the exemplified golden cicada of the nascent People’s Republic.

It all loosened up. The groups that used to come in to change us finally decided enough shells were shed and settled down. People were allowed to own more things and could move around without being approved by some sort of authority, while I was allowed to earn a job in the new local post office.

Of course I started as a mailman—one of the pigeons that carried messages and intelligence from emitter to receiver within Feng-Xian—and took daily doses of morning banter with the now-better-housed townspeople. My conversations with them almost always centered wholly on their crops and children until this one time when Mrs. Ma, an elderly lady whose son worked in a technology company up in the city, told me,

“Bo-Si, I’ve heard something invisible and huge is being built in the cities these days...it’s something they call...the *internet*! My little boy says it’ll let everybody deliver and receive things to and from everybody else; wouldn’t that replace you someday?”

I nearly dropped her monthly newspapers onto the dirt in awe. Exactly three months ago, my mother was complaining to me how the oakwood chair the Distributors gave us could only be hawked away to some bored golden-haired tourist from Switzerland because of my “sloppy markings” on its top. Surely the foreigner had not taken it back to his native country, correctly interpreted my worn hand-drawn diagrams, and somehow published it to the world as *his* “internet innovations”?

Such a thought bedeviled me until at nighttime that day when I resolved to myself, thinking: According to Mr. Li, knowledge is priceless and cannot be bought or sold. The Swiss man owes me nothing. He paid for the chair and took my free, no-price ideas. That’s what “priceless” means, right? And why would I want to use my bragging rights now to claim that I invented the internet if such knowledge would have no price either?

I then drifted into sound sleep with the assuaging belief that my concept of the internet would be worth nothing, that it belonged to everybody—thus ended the only memorable ripple in the sea of my forty-year sojourn in the post office.

I was told by my superiors when the new millennium came that I could step back from my occupation, begin to take pensions, and go off to mind my own business. I never got to know why they told me this, but I decided that I earned enough as a message pigeon and gladly took their advice.

Post-retirement issues, however, clung to me like maggots to exposed pork. Did the managers tell me to leave because I was too slow, too inefficient? I certainly was, compared to the young men and women from the other inland provinces, but that was not a sufficient excuse to my taste. I could do much more than play a pigeon. I could help stamp letters, write reports, meet with partners...I could do a lot of things as *one person*, and—

What if *one device* could do a lot of things at the same time?

I again tasted that selfsame feeling which came to me fifty years ago when I wanted to talk to Mr. Li. Almost everything people used had only one practical function. Wouldn’t it be great with something could have a lot of such functions? Sure, Swiss knives could cut strings, open bottles, and pick locks, but those usages weren’t primary.

I could put a telephone, the internet, and some more of digital entertainment into one compact, handheld slab of synthetic metals. There could be a touch-controlled glass screen on one side of the slab for the user to navigate everything and a small, handy camera on the other for the user to take down lovely memories. On the bottom of the slab could be a row of little holes for a speaker on the inside to play music through, and on the bottom of the screen could be a button to press in case things went wrong. The sides of the slab, though thin, could fit three buttons: two for volume and one for power.

How was this all going to happen? The components, of course, had to be small. I could build a special lamp that gave off this extremely thin laser which would carve tiny wires onto metals which weren't too conductive to make... *chips*. I could concentrate a lot of dark lead into a tiny metal casing, making a... *battery!*

After scribbling all of these plans onto the blank papers left as vestige from my postal career, I took to macroscopically examining my creation. Yes, it held all of the functions in the most important devices of the time—it could call, play audio, take photos, and deliver messages—it was all three of them. It looked like a phone, but was much better, did much more than a phone, was internet-connected, intelligent, intellectually adaptive... it was the *iPhone!*

I immediately headed downstairs for a walk to celebrate. It was March again, as brisk-winded as ever, but I let none of the whining air get in my feelings. I had made something again, whatever it was, and invention set my joys afire.

Yet they were extinguished, quite deliberately extinguished when I reentered my apartment, for my papers were nowhere to be found, carried mindlessly away by the gusts of wind which went through my door and out of the window, nowhere to be found! At loss, I spent the rest of the day in utter silence.

I heard a foreign, bewildered hand sifting blindly through the bushes then picking out sheets of tattered paper and was not surprised at all when I heard my Feng-Xian neighbors discussing this “new, multi-functional, revolutionary *iPhone*” released by this myopic, gaunt man in the United States who liked wearing black wool shirts and jeans several years later. Knowledge, I understood well by then, was priceless, and that American owed me nothing at all.

In the coming decade, I predicted his every move: The phone was to be made bigger, into a pad (iPad), and the speakers on the phone would be better if they could be put in the ears whilst connected to a device (AirPods). The latency between his new releases and my ideas were consistently, and exactly, one year. Impressive.

Feng-Xian grew over the years, gaining size, people, money, and noise. My childhood friends were becoming grandparents. Life really changed, they said. Look at these kids today.

It all went up—the floors, the speed of travel, the diversity of iPhone's variant devices—but for some reason it occurred to me that something wasn't right. People simply replicated housing and office buildings everywhere. Growth was slow, stable, steady, and constant. The change wasn't changing; people were adding when they should have been multiplying, so...

What if our devices performed *qualitative* change over *quantitative* change?

Again that exuberant rush to craft seized me like it did over the internet and iPhone, yet everything seemed much simpler this time.

To change qualitatively, devices must be able to learn, and they had to be able to actively remember before doing that. It was obvious; I could use everything from the internet, feed it to the iPhone that was now already smarter than ever, and let the iPhone *think*. It would then process all of what I gave it, build connections between cause and effect, fore and aft, and correct any of its mistake through more experience.

I could provide for the powerful hardware this would need by coordinating many of the chips in iPhones and iPads together to make computing devices much stronger than normal—*supercomputers*. The rest of the work would be done by the device, it developing on its own.

Given enough time, the device would be able to *think* like humans. It would be able to compose, to write, to paint, to do almost everything people are easily capable of. It may even replace people, in the form of a robot or automaton—*automation*. They, man-made contraptions, would hold the intelligence of people—*Artificial Intelligence!*

I did not do or feel anything after typing this into an online document and being notified that night that my files, one of which I just finished, were leaked overseas by a glitch in the iCloud system. After all, knowledge wasn't worth a single *yuan*; it was priceless.

It was not five more years before anyone appeared to work on Artificial Intelligence. When people finally did, though, they went quick, and ChatGPT, one of the neatest gadgets to ever exist, came out in another five years.

Trying out an advanced version of GPT in yet again a tempestuous March, I asked the robot, “What does the saying ‘knowledge is priceless’ mean?”

It typed out two thick paragraphs of text in five seconds that generally read:

“‘Knowledge is priceless’ is a proverb that largely refers to the idea that knowledge, or intellectual property from the human mind, cannot be priced because it is invaluable. It cannot be bought or sold because it is the greatest treasure of humans and it was likely believed at the time of the proverb that it should be held dearly, prized at heart.”

What?

I should have paid more attention to Mr. Li, but there’s no medicine for regret:

It almost hurts for me to say this, but I, Wang Bo-Si from Feng-Xian, China, now claim invention copyright to *the internet, the iPhone, and Artificial Intelligence!*

NOTE ON CHINESE NAMES (which are purely fictional):

Wang Bo-Si (narrator) translates to 王博思

Li Kai-Ming (the village teacher) translates to 李开明

Blisters on the Soles of our Feet

Shanghai High School International Division, Zhang, Ariel – 15

Rust tinted the air and painted the sky pink across the Hebei–Henan borders. Blisters and calluses that formed on the soles of our feet and joints of our knuckles starting from the very first day of work were now rock–hard to protect us from heavy metal lifting. We trudged home with our now weathered face and aching back dreading the next day to come.

It was year 960, and China accelerated forward with new technologies and factories popping up everywhere. Little did we common farmers and merchants know that it would later surge into dark economic prosperity. Small talk with all the farmers, while sweat beads trickled down our faces from the scorching sun, led to the conclusion that we were perplexed by such a surge in this burst that swirled around. We didn't learn much as our knowledge was only but limited to how to plow, sow, and harvest. And fate stayed that way, up until one morning that was greeted by the stomping of horse hooves and the screeching blare of a horn. A soldier, high upon high horse rolled out a notice and with no inflection read aloud,

“The increase in population has led our China to become full of technical advantages. With dutiful respect to your country, all are expected to keep up with the economic bursts. Thus, there has been an order for off–season farmers in this very village to now work at the iron factory from now on. There will be money granted upon efforts.”

Chaos erupted within the crowd. “Money” was only a gold–colored plastic sign under a few jiaozi per day of work. Mere words morphed to sound pretty were as disgusting as the thought of working in iron–smithing factories. But who was to say against the upper class? We were nothing more than hammers and chisels to them and our voices were pretty much beckoned away with the flick of a hand. Frantic pranced around our faces which reflected on each and every farmer who saw this. Only frantic pranced helplessly. Dragging one foot in front of the other now seemed too hard of a task when the hopelessness of power towered over us.

And so, we pulled away from their fields and learned how to smith with iron. Human labor intertwined with the smell of coal and metal being modeled encircled our life. Dirt filled the gaps in our fingernails as we poured the molten metal into sets of identical molds. We smithed weapons, we smithed for our agricultural tools, and we smithed from the most basic woks to the most complex Buddhist statues. A three to four–meter–high blast furnace roared as it was stuffed with charcoal and iron ore. In teams of four and six, men worked on shift, as scorching hot molten metal slithered out of the base of those blast furnaces with the burning of fuel. The mass production of iron brought wealth to our country for some time, and maybe for that fraction of a second in history's time, we were happy. Our fate as poor farmers had changed as we saw our country take a step forward to success.

But we were only poor farmers. A poor farmer could only see dirt under a general's boots.

Soon enough, Mother Earth frowned her eyebrows. It wasn't labor that ran out, nor was it the availability of iron. It was the fuel that melted all the iron that limited the production. And at the same time, an order was once again delivered from a soldier,

“Towards the north shall the Liao Empire settle. And towards the north is our motherland being controlled. Mongolian empires and nomadic groups started their invasion. War, my smithers, has loomed over us. There has been an order to recruit a massive army, thus, it is expected of these factories to provide hundreds of suits of armor and tens of thousands of iron heads. Do not fail these warriors as they fight for the heartland and give them all the iron possible!”

Empathy was lacking in every single sentence, every word, every letter. Making weapons was hard enough. Now that there wasn't any fuel to even craft what was needed set trepidation into the air. The only solution to this was to stop the production of agricultural tools, statues for temples, and the everyday things common people needed in life. This was the only way to provide enough iron for the armies. Trepidation roared and was inscribed on our faces. The mass manufacturing of iron had led to the prices of these objects being low enough for regular farmers to afford. But if the production of these items is cut off, a wok could cost more than a month's worth of income. Only the rich had the power to afford such things. Our hearts were filled with anger and rebellion forcibly hidden with the terrors and constraints of knowing who we were and where we stood in society.

Puny voices echoed inside us. Timid reflections after a day's hard work seemed as frail as ever. The thought of wooden tools to plow a farm, and the cognition of dusty worn pots and old statues reflected little hope and motivation for iron smithing. For once, we wanted to take a step back. Each step forward sent fatigue and soreness that not even the calluses on the soles of our feet and knuckles could ever stand.

Pt II. Painful words in Stygian Ink

Rust tinted the air and painted the sky pink across the Hebei–Henan borders. Often, we sit down on wooden chairs padded with delicate designs on cushions working out nothing. On the right side, an ink brush lay on the desk, with fresh stygian ink wrapped around the tip. On the left, lightly placed we find a blank scroll of paper, destined to have something written on it, but not a speck of ink has landed on it yet. Guilt entwined with unspoken irritation raged on the tip of our tongues, never expressed, as our face lay straight, our eyes narrowed and denote, our voice bland and serious.

It was year 960, and China accelerated forward with new technologies and factories popping up everywhere. Trades of goods and materials lead to a great influence on economic and cultural diffusion. Politics, the latest invasions of our country, and stresses that China needed to urge the production of all industry lay on our hands and settled like a mountain upon our shoulders. Generals both had the power and the responsibility of all people, from commoners to emperors. What was promised after passing the imperial exams where wealth and becoming a member of Guan Hu. We were told being a part of Guan Hu meant becoming a general, deserving respect, honor, wealth, and power. Only responsibility, tactics, invasions, and pressure flowed hand in hand with those sublime words. And so we, under the stressful urging of other empires, took out ink brush and wrote down in words of pain,

“The increase in population has led our China to become full of technical advantages. With dutiful respect to your country, all are expected to keep up with the economic bursts. Thus, there has been an order for off–season farmers in this very village to now work at the iron factory from now on. There will be money granted upon efforts.”

Chaos erupted within the crowd. There were people who agreed and people who disagreed. Meetings were held in vain and terror. Decisions were never right nor wrong as each fought for what he believed. Stuck in the middle, with jealous glances from farmers and merchants, and impossible expectations from emperors and the nobility left us on the verge of desperation. But we did what was best for our motherland's power and face, as we forcefully turned our eyes away from farmers we knew wanted to protest, forcefully turned our eyes away from the soul of mother earth, pushing it to its extreme.

And so, under our forced power, the distance yet powerful clinking of metal aged in our ears. But with that, China shot forward with the metal industry. By 1070, we had smithed China's iron production to 1.2 kilograms per capita per year. Iron was used in everything, providing farmers and commoners with an affordable cost that brought a smile to their faces. Half of the mountain that settled on our shoulders was lifted as we saw with our own eyes that China was growing stronger and wealthier. For a while, the ink brush and blank scrolls were not used to bring frowns to faces but danced across the paper as more plans shot forward to bring China to glory. We, generals, had

accomplished our goal in responsibility and honesty. What was expected was the honor and respect that we deserved after cruel tortures of rules to set and plans to take.

But the long-lost honor and respect we craved never came as history played us like fools. Invasions started from the Liao empire. Brows furrowed once again, and tension upraised after a minuscule break. As our brushes once again hovered above those blank scores taunting us, the news said that fuel ran out. With little fuel to melt iron, the production of iron would shrink. Responsibility and decision-making had started a race against time. With no other choice and desperation, another notice was sent under the looming dark skies,

“Towards the north shall the Liao Empire settle. And towards the north is our motherland being controlled. Mongolian empires and nomadic groups started their invasion. War, my smiths, has loomed over us. There has been an order to recruit a massive army, thus, it is expected of these factories to provide hundreds of suits of armor and tens of thousands of iron heads. Do not fail these warriors as they fight for the heartland and give them all the iron possible!”

Empathy was lacking in every single sentence, every word, every letter. But each and every letter was forced with pain that was never wanted. Knowing that the once-affordable iron woks or agricultural tools would now become a luxury that only the wealthy could afford hurt us too. But in the eyes of China, laborers did mean little. We were plainly just the ones in the middle that acted so bland in front of all. We had control and utmost power of actually nothing. Empathy not only lacked in the words that we wrote down, but empathy lacked in our lives, which was all but focused on making China glamorous. The industrial growth of iron led trade to flourish. It led trade to flourish over the sweat beads of workers and the feeble pain of generals.

Puny voices echoed inside us. It was the tip of exasperation, with infinite shadows scampering around, bouncing around the corners slipping away from our grasp. It wasn't hard to control and lead. It was hard to control and lead with a mountain upon our shoulders, each decision bringing fury to one part of our country as perfect paradises never existed. Those painful ink brushes and empty scrolls ached as stygian ink dyed the white to black, iron to armor, hearts to stone.

How I took part in the invention of paper

SKH Tang Shiu Kin Secondary School, Chung, Pui Lam – 16

“And that’s the history of the Four Great Inventions of China. Well that’s all for today, goodbye class.”

“Goodbye and thank you, Ms. Chan.”

After two long lessons of Chinese history, it is finally recess. I’d been sitting and waiting for this lesson to end since the moment it started. It’s not that I dislike Chinese history, it’s just that the lessons were too boring for me. What’s the point of learning history when you’re not going to use it in the future?

“It’s not like you can learn anything else from the four great inventions other than the inventing process.” This was what I thought when bright light flashed upon my eyes, everything became blurry and slowly faded into darkness.

“Ugh, what happened?” I said as I opened my eyes. All I remembered was fainting after seeing a flash of light. I looked around to see where I was. To my surprise, I was not in my school’s sick bay but instead in some kind of old Chinese village where everyone was wearing those ancient Chinese clothing I saw in our history books.

“There is no way I traveled back in time... or is there?” I quickly went and asked the first person I saw.

“What dynasty is it?”

“Strange question but it is the Han dynasty,” the man replied.

So I somehow travelled back in time to the Han dynasty and I didn’t think I knew how to get back, the best thing I could do now is to find a place to stay and probably a job so I didn’t starve to death. I introduced myself to the man and ask if there was anywhere in this place that provided a shelter and work so I could earn money.

“The palace workshop is looking for more workers, I suppose it also provides shelter and food other than the basic salary so if you’re interested you can start working today.”

“That would be wonderful. Thank you, mister...”

“Oh, almost forgot to introduce myself, I’m Cai Lun by the way.”

Wait...WHAT? The Cai Lun who invented paper? I couldn’t believe the first person I talked to after travelling in time is a historical figure from my Chinese history book! I had to know if he had invented paper yet, if not maybe I could help. So I asked him if he had ever thought of making paper.

“I have thought of making paper that is cheaper and easier to write on but I don’t know how, I have read a lot of scrolls about paper making but I just can’t figure it out. The materials are always either too expensive or makes the paper too rough to write on. Why did you ask? Do you have any good ideas?” If only I had paid more attention in Chinese history lessons, I would have remembered all of the ingredients but I didn’t, so I could only reply with a no.

There’s a question that always bothered me, why did he have to invent paper in the first place? It’s not like there wasn’t anything to write on before. That’s when he told me his story. “I have gained interest in paper making recently, so I tried getting more information by reading bamboo scrolls. That’s when I realised the problem. The bamboo scrolls can only carry a certain amount of information. If you want to learn something by reading, you have to read dozens of bamboo scrolls which was very inconvenient and very heavy to carry around. That’s when I thought of inventing a new kind of paper, the type of paper that can be easy to write on and is light enough to carry around.” He wanted to invent this new type of paper so that people no longer had to write on or buy large and heavy amounts of bamboo scrolls. Paper also takes up less space than bamboo scrolls too so people could have more storage space. Before I could ask any more questions, he spoke, “Since you seem to have a keen interest in paper making, why don’t you help me with the invention of this new kind of paper?”

“Wait...you’re asking me? Really? Me?” I stood still in shock for a few seconds suddenly realising he was still waiting for my answer, I blurted out “Yes!” Who doesn’t want to be a part of inventing one of China’s greatest inventions? And this is how I somehow participated in one of China’s greatest inventions of all time.

We went searching for suitable materials next morning. The only thing I remembered about paper making from my textbook was that the materials are all some kind of fibre. I told Cai Lun about this and we started gathering materials that contained fibre. We found some old rags, leaves, twigs, tree bark, hemp waste and old fishing nets. All of them were free of charge as they are mostly waste that people didn’t want. We experimented for days to find the perfect combination and method to make the paper but nothing really worked. We managed to remove some materials that cannot be made into paper and were left with these four materials: old rags, tree bark, hemp waste and old fishing nets. After a week of experimenting, we finally came up with the perfect steps to make the paper. Cai Lun was so excited about the success and immediately took the finished product to the emperor, hoping it could be largely produced so everyone could enjoy his new invention and the many benefits that came with it.

At this moment, I finally realised the importance of these inventions. These inventions weren’t invented for no reason. People invented them in the hope of making their life easier and more convenient, hence improving their living standards. Without these inventions, people’s lifestyles may not have been improved and we may not have all the things we have now. Learning about these inventions not only teaches us their invention process but also teaches us the importance of innovation and perseverance. Without innovation, the mankind may not be able to develop any further and can only stay at the same place without any improvement. Without perseverance, inventors may give up on their inventions because of a few failures or problems encountered. I learnt a lot from this strange adventure. As I was going to find Cai Lun, thinking if I couldn’t find my way back to the future, at least I would have a person to stay with for the rest of my life, then the same bright light appeared from nowhere.

This time I didn’t faint instantly, a portal-like thing appeared in front of me and immediately sucked me in like a vacuum. “I didn’t even have the time to say goodbye.” I thought to myself and the next thing I knew was that I was already sitting at my seat in my classroom.

To my surprise, I was transported to the time when my Chinese history class had just started. “Alright class, today we will be learning about the four great inventions of China. Now open your book to page 56...”said Ms. Chan. I flipped open my book thinking maybe all of this was just a dream until I saw my name in one of the paragraphs about Cai Lun. “Oh. Look, one of these people who helped Cai Lun has the exact name as yours,” my classmates told me. Only I know that the person in the history book is actually me, and I technically just changed history.

The Fascinating Tales Of 'Tik-Tok' Devices: Timepieces In China

SKH Tang Shiu Kin Secondary School, Fok, Tsz Him – 12

‘Finally finished my homework!’ I immediately tidied up my enervating assignments into my school bag, exhausted from all the workload I had. I quickly laid on the sofa with slight drowsiness, and I gazed at the clock, hanging on the wall.

Suddenly, curiosity emerged my mind and I kept wondering the same question for hours in darkness: how did China measure time in the past? I decided to pop out from the sofa, and opened my laptop to browse articles related, just to content my inquisitive mind.

In the modern century, clocks are widely used to measure time, which are devices that measures and reports time. Clocks exist as a significant necessity towards many people to know the present hour, minute, and even

seconds, and they almost appear everywhere you can imagine, such as on your phone, houses, shopping malls, MTR stations, and even in satellites! They also exist different forms, from large time reporters, to small portable watches, and even on digital smart phones, websites in the internet. Clocks do play an important role towards the world nowadays.

However, time is also important in ancient China. China has been an agrarian society for most of its history, where many people carried out cultivation. For example, it was found that in the Qing dynasty, a majority of the population (90%) lived by agriculture, no matter poor peasants or the rich. Therefore, time also plays a significant role towards ancient China as it directly relates to agriculture. Farmers needed to carry out key processes at proper timings to maximize crop yields, such as knowing when to plough the soil, planting and the harvesting crops at the right time.

But how did ancient Chinese people knew time? Most farmers used the agricultural calendar (Nongli), which is still utilized nowadays. This calendar system was invented at around 2697 BC and was related to the mythical figure of the emperor Huang Di. It divides the years into seasons for aiding cultivation, and was integrated from 2 types of calendars. The first type is the solar calendar, which is based on the positions of the sun among seasons, and is quite similar compared with the Gregorian calendar; the second type is the lunar calendar which is based on the orbit of the moon around the Earth, consisting of only 354/355 days a year.

The calendar also consists of different 24 solar terms. They are periods that marks a particular natural phenomenon or an astronomical event. These solar terms equally divide the year into segments based on the Earth's movements around the sun. Such features of the calendar system play an important role and influence towards agricultural production as it helps the farming community to make decisions carry out agricultural and daily activities, and to help prepare for different events happening during the season, such as equipping for a rainfall. Apart from this, it also has a great influence towards Chinese culture as well.

Moreover, ancient China also made tools to measure time within day and night. Sundials were developed and they seemed to be the earliest timekeeping devices in China. It was found that to be used since the Zhou dynasty. Sundials of China featured a gnomon, which is a pole attached vertically on the sundial on the dial plate, the base of the sundial. As the Earth rotates around the polar axis, the sun appears to be at different positions during the day. People observed such phenomenon and started to develop sundials to cast shadows of gnomon towards the dial plate through varying positions of the sun, and the time can be identified by the position where the shadow is pointing on the plate. Sundials played a significant role on marking the passage of time accurately as it relies on the rotation of the Earth.

However, sundials could be only used during daytime because of the absence of sunlight in the hours of dark. People at that time could not even recognize time intervals in the dead of the night. Therefore, more advanced timekeeping tools started to evolve. Water clocks, known as clepsydra, started to develop at that time. Moreover, sundials could not maintain a constant division of time as it assumes length of days on the Earth are constantly 24 hours.

Water clocks were instruments that measured time by the regulation of water flow. Various types of principles of water clocks were also developed: some used the rate of overflow to measure time, while some measured time with a steelyard, and even simply with a sinking bowl! Despite water clocks were able to measure time with less than 1% of percentage error, many of them were still improved by different people at the same time. Some had included a speed control system to adjust the water flow rate, while some improved the accuracy of water clocks, fostering the contrivance of mechanical clocks.

The world's first mechanical clock was made by Yi Xing, a Chinese inventor and a Buddhist monk. Originally it was planned to be served as an astronomical instrument, but it accidentally worked as a clock. It operates by dripping water to buckets attached on a big wheel to power it and make continuous revolutions within 24 hours.

Another famous mechanical clock was built by Zhang Sixun, which also worked with a similar principle but it employed the usage of mercury instead of water. The reason is because water would freeze easily during frosty, frigid winters, making the clock stop working, so mercury can avoid such problem as it has a low freezing point. Such inventions not only improved the accuracy and standardized measurements of time in the past, but it also advances studies of astronomy and even shows a great influence of Chinese culture.

After seeing numerous information on how did ancient Chinese refined the technology of timekeeping in ancient time, I was amazed by the intelligence of Chinese people who worked out different inventions by observing the phenomena happening around them, such as the varying positions of the sun, the counting of days where the moon orbited around the earth... all were such fascinating discoveries advances the improvement in managing and interpreting time intervals. In fact, under the world with such poor knowledge built, I was also astonished about their effort towards discoveries, admiring their perseverance.

When I was scrolling among countless websites and articles, I noticed a piece of news article which wrote: 'Chinese atomic clock released to space, bounding to be the most accurate clock in the world'. Such interesting topic aroused my attention, so I decided to press into the link and I browsed the riveting website with questions in my mind, what is an atomic clock?

Atomic clocks are one of the most advanced inventions in the world. They are clocks that measure time precisely almost with a very small error, so they are widely applied in navigations by satellite networks, GPS, telecommunication networks and scientific research. They work by monitoring the resonant frequency of atoms based on their different energy levels. Recently, different atomic clocks were invented and improved, and reducing the accuracy on the measurement of time by changing the type of atoms used, the energy level transitions used, and developed cold atomic clocks to slow down the movement of particles to minimize possible errors.

For example, China developed hydrogen maser clocks and cesium clocks, which are also similar to atomic clocks. Hydrogen maser clocks have small bottles of hydrogen gas leaked out and sends them through a magnetic gate to measure the energy contained, which has a short term stability; while cesium clocks they expose cesium atoms to microwaves and count their oscillating frequencies, which have a long term stability. Despite both types of clocks are authentic and accurate, their performances that varies with environments and other factors, so their measuring results may be easily affected by other factors.

Moreover, China also developed the world's thinnest atomic clock, which is the rubidium atomic clock. It has just 40 mm thick, which is so tiny that it can fit in the palm of hands. Such clock is also applied on many aviation, navigation and telecommunication aspects, and a large number of them are being carried with satellites to provide positioning as well.

Therefore, China also modified different atomic clocks and improved them. Finally, the cold atomic clock was invented in 2016, and it became the most accurate atomic clock around the world. This clock features low-frequency lasers to help lower the temperature in the clock, slowing down the movement of atoms. This helps to reduce the likelihood of counting errors. Moreover, its preciseness would not be affected by different physical environments, and it is much light-weighted compared with other types of atomic clocks. Such features led to a great breakthrough towards the development of atomic clocks, and it improves accuracy of different navigations, positioning as well. It is now operating in the Tiangong space station and helps establish a space-based timekeeping system. However, China is still planning about how to benefic people around the world with such precise atomic clocks.

After reading the news, I was astonished by such rapid developments of China's technology, from simple sundials, lunar-solar calendars, to microscopic atomic clocks. China's technology development not only just improves time accuracy, but the life of people around the globe. From cultivation, knowing the time, to navigation and even positioning a small object on a globe, China has the tales of timepieces written in a fascinating journey, and indeed it

had a great influence around the world. It helped people to manage different personal events well, knowing their ways when sailing in the endless ocean, or even forecasting weather in the future, preventing natural hazards and minimizing the loss. China did play an important role towards science and technology.

However, China still has their ultimate goal. In the future, China may develop even accurate atomic clocks that merely drifts off only a second faster or slower than the life of the universe. Will China ever reach their goal? Let us wait and see their spectacular tales of timepieces continue to develop in the future.