Venturing into an Unknown World

By Tristan Pang October 8, 2016

People strolled calmly across the wharf, some being led by their joyful, bounding dogs. Children swung happily on the playground under the warm glowing sun. Cries of joy bounced up to Professor William Stephenson's ear. He looked out of his office balcony deep in thought, cutting an interesting figure in thick, black-frame spectacles and a neat shirt. William Stephenson was in his seventies but still teaching theoretical physics and cosmology at the University of Cambridge. He sighed, took a sip of his coffee and returned inside, knowing that the stunning sea view, the harmony of nature and life as he knew it could not last. Climate change had bothered the professor for a long time.



CHILDREN PLAYING

A cool light breeze hit William's cheek, in contrast to the 30 degree heat. He wished he could jump in the water like the children across the road, but unfortunately, he was still getting used to his bionic limbs. He had suffered from motor neurone disease for decades, leaving him progressively paralysed. After a recent scientific breakthrough, and being one of the world's

greatest living scientists, William was prioritised to be reengineered with braincontrolled bionic limbs. The prosthesis was successfully attached to his body last month. Just by thinking about it, he could move freely without his motorised chair.

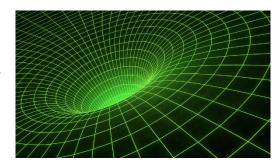
However, the communication device he had been using had not been progressing. He still had to use a small sensor activated by a muscle in his cheek to 'type' words. He always thought that if someone could invent a machine which could read his mind, it would save him a lot of trouble. He knew that this too would become a reality sooner or later.

As requested by his doctor, William started his morning walk around his office, exercising his muscles and getting used to his new prosthesis. He was bored to death. His wife had passed away at the beginning of the year. All his children had grown up and were living overseas. Even worse, he was going to retire at the end of this year. He felt lonely. Very lonely. He wanted adventure.

Luckily, this was no ordinary day – the Professor's time machine was due to be tested. The Professor hobbled out of the office and walked with a rolling gait

towards his workshop. It was not too far from his office, only a block away. But it was enough of a distance to work up a sweat.

William had toiled away on his time machine for most of his working life. Travelling in time means travelling at very high speeds, close to the speed of light. A time tunnel or wormhole could do even more, allowing him to travel huge distances in space-time in a far shorter time relative to the traveller.



A REPRESENTATION OF A WORMHOLE

William knew this machine would work but previously had had no courage to try it due to his mobility problem. "But now...what do I have to lose?" he mumbled while his pace quickened toward the complex ahead.

William entered the complex where a group of engineers came to greet him. He told them his plan and assured them that he would be fine going alone. What they had to do was to prepare enough fuel and clear the runway for him.

Paying no attention to their concerns, William keyed in the time and date on the keyboard. He hesitated for a moment, but not out of regret. Time travel was every scientists' dream, and here it was, about to come true. It was only that he needed to think twice about the designated year as he knew that he could never travel back: this was the grandfather paradox. Travelling back in time is self-contradictory. If the time traveller goes back in time and kills his grandfather before his grandfather meets his grandmother, he or she is never born as a result.

William knew all this, but in his obstinate way, he just didn't care. He was ready to farewell his familiar world for good. But making a decision as to the year was harder than he had thought.

"Hmmm...should I travel to a faraway future? Perhaps I could even travel to the end of the universe to witness how our whole cosmic story ends?" he wondered aloud.

"Better not. It may be tragic and I don't really want to see that."

He then thought, "What about 100 years from now, when things are still not too unfamiliar?"

After plugging "2116 A.D" into the device, a synthetic voice announced, "You will arrive on the 1^{st} of April 2116 in approximately 8 years and 107 days relative to you. Get yourself ready and press enter."

William strapped himself into the chair, enclosed in a thickly padded suit that would hopefully protect his body. He leaned forward over the control panel, raised his finger and pressed the "enter" button firmly. The door hissed closed and bright lights flashed, illuminating millions of wires woven together. A hatch opened, revealing swirling plasma in a glass tube. The machine lurched forward. An electronic screen alerted William to "hold on tight" as steam filled the compartment, heating it by a few degrees. Suddenly, the machine sped up by a factor of ten, then a thousand, and boomed through space-time. Then, the machine injected him with some fluid causing him to black out almost immediately.

He first felt a strain in his leg, then the tingling came. William sat up. The machine had stopped and the cabin was dimly lit with a faint glow from the sleeping computer screen. He looked at it intently. More than eight years had passed for him, which was why he had installed a system to knock him out, meaning he would use less oxygen and energy. It would have taken more than 4 years for the machine to reach its maximum speed of almost three billion meters per second, which is where time dilation can occur, meaning that only a short time will pass for the traveller, whereas many months or even years will have passed on Earth. His mind brimming with possibilities, William reached out to the command panel, released his body and let the door squeak open.



THE GLASS DOME

William gasped as an unexpected scene lay before him. He had found himself in a giant glass dome about 100 meters high and hundreds of kilometres across, filled with thousands of "creatures" - people and robots milling around, on the ground and in the air. William noticed that everyone was moving very fast. He watched closely and realised that the "creatures" on the ground were all on hover

boards and the "creatures" in the air had a portable device that vaguely resemble jetpacks with them which he believed allowed them to increase their air resistance and thrust, letting them leap into the air. Bionic limbs might no longer be needed with those ingenious gadgets. There was no difference between mobility and immobility in this era. "What a relief!" William thought.

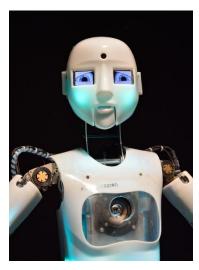
On the roof and walls, large headlines scrolled across screens. "Large forest fires in the north causing chaos, millions displaced after floods, storm takes down helicopter." As if reading his mind the screens flashed the current time and date ... 08.00, 2nd of April, 2116. He had travelled forward almost 91 years as planned!

While he was celebrating his great success, a loud bellowing voice announced "make way" as a large floating boat bobbed in the air. The bizarre transport boat carried large crates of berries. The craft was made of metal panels, not unlike a row boat back in William's time. The driver was sitting on the top while a robotic voice assured whoever was listening that the craft would reach its destination in a few minutes.

Just when William thought he was thirsty, a drink robot came and poured him a glass of water. At this point, he wanted to ask the robot a question but it just zoomed off. Now another tall robot approached William and asked if he wanted to say something. William started to freak out and ran away.

"How silly I was to hope for someone to read my mind. It's such a bad idea!" William exhaled.

Across the road, a shop was bustling with hundreds of people. Limping into the shop he saw rows upon rows of gear shining proudly on their racks.



THE ROBOT

A hat caught his eye. It had a large propeller on the top and a pair of Google glasses attached to the front. Then the rack came forward and put one on his head.

Eagerness flooded through William as he started to try the things on in the shop. There were auto cooling suits of lightweight metal and helmets with full 3D movies and a sound system. There were sunglasses that shaded themselves to the extent of the sun's brightness. He was not surprised with those gadgets as they more or less were predicted at his time. After all, he was a scientist. He knew everything could be possible. He just didn't understand why there were so many people wanting to buy such strange party wear and gadgets. That is, until he went out of the dome.

William was beginning to become distrustful of the place he had found himself in, as everything seemed able to read his mind. Yet curiosity got the better of him and he moved toward the dome's edge. As he shuffled forward, he noticed that everyone was oddly dressed in shiny clothes that sparkled in the artificial light. William's first thought was that a carnival was going on.

Soon he arrived at a door, but couldn't seem to open it. A monotone voice spoke out, telling him that he needed to wear authorised gear. William didn't quite understand.

"This might be a restricted area similar to our airport. I need to be a citizen to go outside. The others might not need to show their passport as their identification chips are implanted into their body. They probably had already noticed I haven't got the right identity," William thought mistakenly.

William wandered around and peered out of the dome, trying to find out more about this odd place. The harsh sun lit the ground through layers of pollution, casting an unnatural brown light onto the ground. Sand billowed around.

Previous generations had polluted the environment so much that the landscape had become barren. Fires had burnt down forests and floods had washed out beaches. The actual dome was sitting on top of a tall hill which looked down onto an old city. What wasn't submerged was crushed to rubble by earthquakes and weathered by acid rain.

In the distance, groups of people in full metallic silver suits patrolled the harsh outside world in closed cars. William worked out that leftover radiation and pollution particles in the atmosphere made the landscape dangerous to humans. He started to realise they weren't actually having a party. His curiosity was at fever pitch, and he just couldn't resist going out to investigate further. He didn't want to be kept in this "restricted" area forever.

William hid himself in a big group of people and waited for the door to open, successfully getting outside. But the "freedom" almost made him suffocate. A robot etched with the word "city guard" at the front and the back of its body moved quickly to "rescue" him. It handed him a gear with a mask, a hat and a metallic silver suit, but warning William that it wouldn't give him 100% protection. Instead, the robot repeated, he should stay in the dome or to buy proper protective gear from the shop. Then it trailed away.

"Don't worry." William muttered an inaudible "I'll be fine" while putting on the gear. He figured that as long as he could escape the sensors of the robots, no one would come to bother him. The humans here were so unemotional and apathetic, struggling to survive in this suffocating environment. Everyone was stifled by the fumes - clouds of exhaust and toxic fumes spewed from cars and the series of fires caused by the high temperatures.

The scorching sun was really killing him and he knew there was leftover radiation and pollution particles in the atmosphere. He estimated it was over 50 degrees Celsius, and wondered if he'd entered some part of sub-Saharan Africa.

It was so hot, humid and stuffy that it tested the limits of what was habitable. He felt like he was sizzling in a hot pan. It was totally unbearable. He tried to walk faster to find shelter but the heat seemed to come from every direction, from the sun above, and bubbling up from the ground below. Heat and toxic air blew into his face. A sudden gust blew towards William. He felt dizzy as he looked around. Black



A HOT AND HUMID CITY

started swelling at the edge of his vision. He began to collapse and the last thing he saw was a group of metal bodies running towards him as he fell to the ground.

When William woke he found himself in a large circular room. Robots were going back and forth assisting humans while they cared for the injured. A robotic nurse hovered over and asked him if he was alright as a large robot in a cylindrical boat floated across and flatly enquired if William would like a kale or goji berry energy drink.

At that moment, he heard footsteps. It was the first sound of footsteps he had heard, as everyone else was using hover boards. William turned around. Standing in front of him was a middle aged tall man wearing a smart suit. With a deep voice, the man introduced himself as Professor Bill Arnold, expert in time travel. William was puzzled, wondering how he had given himself away. Chuckling, Bill described how he had spotted William's time machine, then hurriedly went back to his office to match all his information, pulling up Professor William Stephenson's profile. No one really knew where he had gone. Over the past century, every scientist had been keeping their eyes peeled to see if he had arrived in their time.

"We are fortunate and honoured that you have chosen our time," Bill smiled. "William, you may not be the only time traveller, but you were the first in history. People knew that your time machine had disappeared. They knew it worked. There have been hundreds of people who have disappeared somewhere into the future since then."

Leaving the circular room, Bill took William to a nearby digital museum. There, William realised they were on a small piece of what once was Europe. To be exact, they were standing at Ben Nevis, the highest mountain of the British Isles. He couldn't believe what he had seen. Ben Nevis was one of the most beautiful places in the world, in his opinion. He had spent his childhood school holidays there. All long holidays, at least twice a year, summer and winter, his parents would take him and his sister there because it was very closed to the town of Fort William, where he was born and lived until he went to the university at Cambridgeshire.

In the beginning, he didn't believe it was Ben Nevis because it was so hot and the water level was so high when he wandered around earlier today. In his time, it

was more than a kilometre above sea level. Reality was sinking in; the consequences of climate change were far more severe than predicted. In his time, scientists had warned of a 5mm water rise and 0.01 degree Celsius temperature rise per year. But what about now?

He tried to look for Fort William on the digital map, another place where he had had fond childhood memories. The map told him Fort William had disappeared 30 years ago, although this wasn't particularly surprising if the water level was so high up at Ben Nevis. Fort William was only a couple of meters above sea level during his time.

He kept searching...Cambridgeshire...no, London...no, what about New York...no, Sydney...no, Auckland...no...William had never felt such sadness. Bill tried very hard to drag him away, but William was lost in his thoughts.

Later, a screen flashed in front of William. "Breaking news," it read. A slow shot revealed a city in ruins. The camera zoomed towards collapsed buildings. Others had broken windows and smoke billowing out. "This is the third city we've lost this week" the news reporter said.

Before William could react, he saw a distressed look on Bill's face. Bill began to explain to him in detail about the loss of the cities.

"We don't normally tell people too much detail as it causes distress," Bill explained. With that, he told of how earthquakes were becoming more and more frequent and severe, and temperatures were rising rapidly, causing many to evacuate. This was in addition to the pollution, high water levels and radiation in the air. But no one knew what to do. Over the past century, world leaders had not reached a single agreement. The truth was instead covered up to protect their own interests. Meanwhile, ordinary people had not been fully aware of what the consequences were.

William felt deep remorse. He wished he had done more to stop climate change in his own time. And now, he couldn't go back and tell people what they were doing to future generations. All creatures and the Earth were now so vulnerable.

"I wish I had done more! Bring back our beautiful world!" he howled as loudly as he could, wishing that his words could be heard far back in time. And for those who were in the past and the present, "We have to do something now!"