

War Between Worlds

Humanity had grown apart in the years since the Acquisition when Earth had become entirely corporate owned, banished complex machines and the algorithm. Mars, to the contrary, had embraced Electralism and the worlds were growing apart. There was a war coming, and both planets and peoples knew it. They just didn't realise how soon.

- from 'Chronicles of Early Humanity' by Dr Sinvent, Minerva

I

ISAAC

That was the last day Isaac wore his education.

He clutched it in his hands, a glass helmet filled with glowing purple wires. He waited and stared at it: the fountain of all human knowledge between his palms. It was warm from electricity, and he could feel his heartbeat reverberating through it for the weight of this moment was heavy on the shoulders, and heavier on the heart.

"When you're ready," said Grandpa in his soft voice.

Isaac looked up at him. The soft white robes, the deep dark eyes set into bronze, no, Martian skin. He knew it was much darker than his own.

"What if I'm not pure enough?"

"Nonsense. You're over two metres now. That's tall, even for a Martian." His eyes crinkled. "And Isaac, your mother was the most brilliant Human being I have ever known. Never be ashamed of who you are." He tilted Isaac's chair back, facing the ceiling mirror. "When you're ready."

The boy took a deep breath and lowered the helmet onto his head. Wires attached, closing his eyes, and opening his mind. Electricity flowed into his brain, like rainwater finding its way into the cracks of a large rock face.

First, he saw only darkness.

Then.

Let there be light.

Blinding brightness. Pure energy unleashed. Everything from nothing. There was a storm, and it was raining stars, and it was pouring galaxies. Billions of years of chaos until the second miracle. Carbon became conscious, complicated, and curious. Human beings climbed down from the trees, walked across the hot sands, and found two sticks. They made fire, and it was pretty, and it glowed, but the flames spread faster than they could control, till the fumes began to choke the planet. Desperately, they turned to machines for the solutions to their problems, and the answer was Martians. The machines designed a new people for a new world, humans without wombs, without wages, without war. Born in silicon cradles.

The images became memories. His mother stood over his cradle, looking down with those earthly blue eyes, repeating softly “my mini martian” as his cries grew quieter.

His father walked in, towering over her, and placing one of his long six-fingered Martian hands onto her back. “Leave him be. He needs to learn to solve his emotions if he is to ever assimilate.”

“Must all things be solved?” She reached down and kissed his forehead, one last time, before she too faded away.

Isaac felt the helmet melt back into a silvery liquid of machine atoms, trailing down his body and returning to the house.

“Drink,” said Grandpa, pressing a warm cup to Isaac’s lips.

“What is it?”

“Tea- my new flavour. Citrusy bergamot and lemon. Like it?”

“It’s the best one yet Grandpa. Have you submitted it? The Algorithm would surely-”

“No.” Grandpa swapped the tea with the morning drink and his eyes turned cold. “And this too- come on- I know it’s hard. There we go.”

“Grandpa,” said Isaac, finally sitting up and facing him. “Something different happened this time. I saw her.”

“Impossible.”

“It was her. If Mars is red it was her.”

Grandpa took off his glasses and rubbed them, putting them back on with a fond smile. Ah- yes, he thought, he does look so much like her.

“I see her in you sometimes. It’s no wonder you do too. To think, tomorrow you’ll wake up in your new life. You’ll have your own votes, your own electricity, your own role and, and... your own life. Will you visit me? I would understand if you didn’t. It is embarrassing- I’m just some one-vote, old doddler, and a flavourist too.”

“No Grandpa. Don’t say that. You’ve been everything I ever needed. More, even.”

He is kind, thought Grandpa. This boy will unite the worlds. Give it time enough, and they will all see him, see the goodness and compassion – and realise his broad emotions are as much a strength as a weakness. He would see angels in Hell.

“Would you like to practice?”

Isaac exhaled deeply and nodded. “I would but... could I have some more tea?”

Grandpa smiled. “Of course you can.” He placed his palm flat to the nearest surface, purchased tea with his mind, and as his hand rose, a ceramic teacup on a quartz plate was revealed. Steam rose from its spout like a smoking chimney. The advent of palm pulling edible food and drink was still profound to Grandpa, though Isaac had never known anything else. Food printers themselves had been a revolution and now they were but antiques. Grandpa kept his, still.

Isaac took a gulp, whilst Grandpa flicked through room arrangements on his palmgram and selected ‘music hall’. The white piano appeared first, then the walls became wooden and grew paintings, followed by bookshelves and ornaments. It was hard to imagine a house with all these things at once, sitting there even when not needed and collecting dust, decaying and ruining, thought Isaac. How inefficient. Grandpa insisted he missed that way, the strange old way, of owning real things.

“How much was the tea?” Said Isaac. He didn’t like Grandpa spending his watts on luxuries when Grandpa was overdue a body replacement. Even if he pretended otherwise.

“Only 200.” Grandpa looked down at his ringwallet, looking at that number, 900 billion. That could save many on Earth, he thought, but getting them there was no easy feat. He looked up at Isaac, hoping he would one day understand his reasons for it all, and Isaac looked innocently back at him. “Would you like to start?”

“I would.”

“Sit down. How about we begin with Beethoven,” said Grandpa, “Moonlight Sonata, third movement.”

Isaac’s fingered lingered still and he looked up from the piano. “Grandpa. Can we talk about Earth?”

Grandpa’s face flashed with surprise, and Isaac caught it, wondering what it was that made the subject so uncomfortable. He never liked to talk about Earth, and he would always shut off the news if they so much as hinted at the subject. Always.

“Earth?” Grandpa avoided those eager eyes he knew were prying.

“Yes,” said Isaac. “I want to know about Mother’s world. The education doesn’t provide much detail and I’m nearly an adult now. I’d like to know more. What makes them so bad? Didn’t they invent tea, and pianos, and even music?”

Grandpa considered for a moment. He had carefully left Isaac as unaware as possible about Earth, and its people, but had been quick to dispel the Martian attitudes about the old planet. Old planet? Even he was beginning to sound like them. Perhaps it was time.

“I’ll tell you about Earth,” he said. “But you know the rules, miss a key...”

“And the answers stop- I know.” Isaac’s eyes lit up and placed his hands to the keys like brushes over a canvas. “I won’t miss one.” He smiled, closed his eyes, and began.

“What is it that you want to know?”

“Is it true they worship an entity? A so-called God?”

Grandpa chuckled. “Many do.”

“Tell me about God.”

“They see him as the grand designer. The one who made all that is, and was, and will ever be.”

“Like the Algorithm?”

“In some ways but different in others.”

“And why don’t they have the Algorithm too? And complex machines?”

“That’s- that’s... Not an easy thing to understand. It’s about free will –yes, your education details the myth, but Sapiens take different conclusions from the science. They believe in... the right to make their own decisions, even the wrong ones. Sapiens have very different ways of organising their society. They choose their own jobs. Their own leaders. They choose their own prices too. Or groups of them called companies do- it’s, it’s all rather natural. The way things were meant to be.”

“You’re sure, that- they choose their own jobs?”

“Yes.”

“What if they choose wrong?”

“Many do. Or have little choice. They have a system of currency too which they all depend on. The theory of their society is the most successful sapiens obtain the most currency. Natural selection.”

“Isn’t that its own algorithm?”

Grandpa chuckled and he felt his shoulders relax. "A very different one. Much slower."

"Then why don't we just become an independent planet if we're so different. We could make our electricity. I don't see why we need them."

"I've explained this before," Grandpa said in a harsher tone than intended. "If Mars were to break the treaty, and produce its own electricity, billions down there would starve, Isaac. Billions of humans. Don't you see? We have a responsibility, Isaac."

"I do. It's just. When you were at work on Friday, I caught some of the news- I turned it on by accident- but there was this man. He was from the Council, and he was being interviewed when he said that without Mars, Earth could only support a third of its population. He said we should stop 'subsidizing the sapiens'."

"What do you think? Should we do that. Let them die?"

Isaac sighed. "That is a decision only the Algorithm can make."

"Perhaps the power to make that decision exceeds even the Algorithm," said Grandpa; the blasphemy barely leaving his lips before he continued, "Mars is, after all, a colony and has no choice in the matter. None. If we produced our own electricity Earth would occupy the planet. Those that can destroy a thing control it."

"But if they did that, we wouldn't be able to feed them, and they'd starve. Wouldn't that make Earth our colony? We're holding ourselves hostage."

The ground began to shake. Ornaments fell off the shelves and the lights hiccupped off then on again until the house remembered stillness as quickly as it had forgotten, and Isaac was the one shaking now. He's still a child, thought Grandpa, and he decided against his original reply.

"Tell you what," said Grandpa. "I have an old friend who knows more about Earth. You could ask him whatever questions you wanted. I won't stop you. Plus, he lives somewhere safe from the marsquakes. What do you think about that?"

Isaac looked at him then felt his robe pockets for his contact lenses, before seeing a new pair in Grandpa's outstretched hand. "I think that sounds amazing- is it far?"

"Just past the zone. But you can't go out looking like this," said Grandpa. He re-tied Isaac's white belt and pulled up his blue robe collars. "There- now you look... sensible."

As they stepped out and into the warm air, Grandpa smiled to himself at how masterfully he had manoeuvred the boy. Did he think the news would work unless he wanted it to work?

The street was busy with Martians. Their brown faces shared strong features, almond eyes and long, white robes that flowed over their every step. To either side, there was luscious green and blue vegetation, as the silos had sunk away for the day, though the odd one could be seen standing like an ivory tower over the horizon. They were curvaceous, and fluid, made of moving exterior parts that seemed alive. They were shaped like nature: shaped like water, and waves and wonder.

Off in the distance, in the city centre, stood the mighty domescrapers. Unmoving, unwavering pillars of civilization that touched the dome. At the very heart, there was an elevator filled with lorries being pulled out or pushed into space. Isaac wondered if tomorrow he would be looking down from a cockpit, but something told him he wouldn't be a pilot, or an engineer, or anything he could think of, but what would he be? What would the Algorithm see in him? What was his reason for being born. His every lesson, what were they all for?

"You're worrying about tomorrow, aren't you?" Said Grandpa.

"Yes. How will it happen again?"

"You'll wake up in your new life. Somewhere in the inner city probably. Your palmgram will be like mine. You know the rest."

"What if I am one of the workless?" The idea of it shook him, to be one of the workless Martians who spent their whole lives doing unproductive things, leaving no legacy, and contributing nothing to society. Totally unmartian.

"Have faith," said Grandpa. "You are an excellent prospect. Besides, chance is a matter of perspective." He chuckled to himself, if only Isaac knew how well tuned each day of his life had been, how careful the balances had been struck. History would know.

Isaac noted the confident tone with caution. Was Grandpa expecting him to be a four-day worker? Few had that privilege. Grandpa himself only worked one day now, and most worked two, fewer three, and hardly any were four. Would Grandpa be disappointed? Isaac looked over and caught him reading the weather on his palm, 'heavy rain.'

"Is that thing ever right?" said Isaac.

"Let's see."

They stopped and looked up at the hazy sky. The sun was hanging low over the western mountains beyond the dome, breezes of dust shimmered in its rays and there – unmistakably – was the faintest red glow of the cloudships in the atmosphere. Soft pitter patter began above. Clouds formed, quickly becoming dark and heavy, blotting out the sun, and casting a shadow over the city, till the hexagons of the dome became invisible, save for the occasional silhouette against the backdrop of thunder.

"And the heavens opened," said Grandpa, "we just had to knock."

Crystals in the concrete twinkled like stars, illuminating the path, as the street glowed in the dark. Grandpa palm pulled a lumbrella from the ground, holding it upright over their heads and turning it on like a lampshade.

“Stand under it with me,” he said. “You don’t want your eyes replaced before fifty. Do you?”

Isaac huddled under with him, and they walked past the silos, past the people till finally they reached the crop towers at the outskirts. Vertical glass buildings filled with moving machinery, pipes of flowing liquid carbon, and the occasional robot measuring the leaves, sampling, and recording, raising, and nurturing them. He wondered whether he would be a horticulturist, but that too felt innately wrong.

Two Humatons rose from the ground. Glass heads followed by sleek white bodies that carried mops and hoses.

“Attention,” they said in unison. “Citizens Micah, Isaac – you are leaving the populated zone. We cannot guarantee your safety.”

“It’s by choice,” said Grandpa.

The Humatons moved out the way. “Proceed with caution.”

And their heads turned to watch. Electronic brains sparkling with electronic thoughts, and when the road ran out, Grandpa turned back to see them still standing there, still watching. Isaac didn’t look back. The boy was raised with machines, no by machines, thought Grandpa.

The path became a litter of stones and dust, and the city noises dissolved into ambience, and the clouds dispersed whilst blue from the Martian sunset shone at their feet. Isaac reconsidered the words of the machines, perhaps it wasn’t such a good idea to leave the populated zone.

“Why does your friend live out here?” Said Isaac.

“He lives underground.”

“Doesn’t he have a silo?”

“Not anymore.”

“Is he an outcast?”

Grandpa chuckled. “No. In fact. He would tell you we were the outcasts. He would tell you many things- and, speaking of. Here we are.” He stopped.

Nothing was obvious to Isaac at first, but there was something, a vault door built into the face of a boulder, covered with thick dust, and lit by a dim, flickering bulb. Grandpa walked up and knocked on the metal in a pattern. He stood back, folding his lumbrella into a torch.

Strange mechanical noises resonated from the door. It started to creep open, inch by inch, until the gap was barely wide enough for them to enter. Inside was dark and the air humid, but there were certainly steps at their feet. Icy white dragons emerged from their breath, spreading their wings as they descended, and they reached another, smaller wooden door which Grandpa pushed gently, but it swung wide and crashed off the hinges. Echoes roared through the darkness on the other side.

Grandpa turned his torch onto a rectangular switch and pressed it down, and high above their heads, after a short pause, a light exploded into life, followed by another, and another, eruptions of light chaining together, stretching across the ceiling, until they were specks in the distance, and there, standing in rows, were spaceships.

Two hundred feet tall, Isaac guessed, with dark engine cones for feet, and scorched cylindrical bodies. Each bore three flags: first, the golden symbol, an arrow through a circle, on a purple flag for Mars. There was the red phoenix on blue of the Western Conglomerate, and the red rose on white for the Eastern Conglomerate.

"The landing fleet," said Grandpa. "Don't stand too close," said Grandpa. "They're bound to fall over soon. I don't like walking through them, but if we do it quickly- come on."

Isaac stared up at each of them as they passed by, grazing his fingers across them, and removing trace amounts of dust. Tomorrow, he would be the same age as the first Martians were when they landed, he realised, and what will we have achieved?

There was music. Faint piano, guitar, drums, and a human voice, definitely a human voice being used as an instrument. How bizarre, thought Isaac, but he found himself enchanted by it, each syllable was the sound of emotion.

"Grandpa, what music is this?"

"Sapien music," said Grandpa, with a faint smile. "They were called Queen, I believe."

"I like it. Sapien music is different."

"Better," said a man from the shadows. "Micah! Is that you. I had not expected your visit after so many years, friend." He stepped into the light.

His pupils were white, hair greyed and tumbling past his knees, shoulders turned inward by age, but tall, and adorned with worn white robes and, Isaac gasped, he wore a red belt. The highest votes for those Martians with the highest aptitude, intellect, and abilities.

“Silas,” said Grandpa. “I was worried you had moved on.”

“I would, if I could find the damned way out of here.” He grabbed at the air and laughed. “No, I love this cold, damp lonely hole. It’s my lair.”

Grandpa embraced him. “How are you old friend?”

“Never been better. Who is our guest?”

“My son- nephew, Isaac. He graduates tomorrow.”

“Ah, boy,” said Silas. He clapped Isaac’s arm and nearly knocked him over. “I bet you want to be a high voter, don’t you?”

“Yes.”

Silas pulled off his belt and threw it at him. “There. Have mine! How does it feel? Now you’re one of the angels. But be careful, boy, some angels fall from heaven.”

Grandpa interrupted, seeing the confusion on Isaac’s face. “He’s here because he wants to know about Earth, old Earth.”

“Oh,” said Silas. “Oh.” His face broke into a toothless smile, and his eyes looked up, blindly, into the dark. “The creators. Ah, yes- yes! I remember well. The library- yes. I have maintained the library. Come.”

He led them past the ships, and through a maze of corridors, with shelves of boxes, weaving through it, undoing the labyrinth, and stopping at the threshold of a hexagon. There were bookshelves up to the ceiling, with dates on the floor, and railed ladders at either end. Silas grabbed one and slid over to 2060, pulling out some old books, non-digital Isaac noted, and laid them out onto the table.

Grandpa narrated it: “It is this year, this fine year, 2062, that lasting world peace has been achieved. Democracy had spread to the four corners of the world, and some say the renaissance, which began in Iceland, has...” He trailed off.

“You can read that?” Said Isaac.

“Yes, and so can you,” said Grandpa. “It’s fundamental knowledge, but, like a muscle, it must be exercised. Try it.”

Isaac opened his mouth to speak, like babies do, and strange gurgles came out.

“It’s impossible,” said Isaac.

“Impractical,” said Grandpa, “not impossible. Pay attention to my mouth, break the illusion I am using it to speak to you.”

Isaac followed each movement with a keen eye, and his mind recognised its true stillness, and like seeing your own nose, or controlling your own breathing, it felt unnatural. Lip writing, remembered Isaac, he had taken it for granted. He blinked and Grandpa's mouth was moving again as he spoke again.

"Your brain is taught to see and hear speech to help it separate your thoughts from others. It was revolutionary at the time. Localised language was a barrier to unification and expansion. Like many other barriers were before the Algorithm intervened."

Isaac was wondering at the hint of contempt in Grandpa's voice when Silas erupted with laughter. "And how well did that work? Boy, do you know how many planets we've settled since Mars? It's not a trick question- answer me."

"None," muttered Isaac.

"You ever wonder why that is, boy?" He raised his voice and heaved his body toward the boy, stopping just before his face. "Because humans, old and new care more about that damned thing, money, than they do about anything else. Tokens of power that we trade between ourselves. Never daring to look. Never daring to see our true purpose. It shouldn't take a blind man to know!" Silas sighed. "Not everything profitable is worthwhile. Human systems are as flawed as human beings."

"But we have the Algorithm. We- we're civil."

"Even the Devil was an Angel," said Silas. "You think you can just put greed in a box and put it on a shelf out of sight? Greed knows no creed." He shook his head. "Have you seen the evil we do unto Earth?"

"Isn't it their fault?"

"Human inflation is a problem we enable," said Silas. "In my days, when you drank too much, you had taken it away. But no- they wanted more. So they sent us to this place, to start another Earth for them. I remember it well, the plan; we were to flood it, make an atmosphere only they could breathe. They expected us to die on the cross. We said no. No! Don't you forget it boy, don't you forget it!" He shook the boy violently. "Don't you forget it. The oppressed make the best oppressors."

"Silas," Said Grandpa. "That is enough. We don't want the boy losing sleep over the politics of the planets."

II

Mars

There is some doubt as to the circumstance of his character. Was he raised with insider information as to the Algorithm's preferences, given his rankings in the arts, and his lacking in the areas most parents focused their children? Or was it divine chance? What can be said for certain is that Isaac was the most profound specimen in the eyes of the machine...

- from 'Chronicles of Early Humanity' by Dr Sinvent, Minerva Social University

Isaac woke up in bed. But not his bed, he realised, and there were unfamiliar voices in this room with him. He had the faint sense of a dream, or rather a nightmare, scratching at him it slipped away, each finger coming loose from the edge and falling into the abyss of forgotten dreams. There were the noises again, clearer this time as his ears tuned, and he kept his eyes closed to listen.

"It must have been a mistake," said a man.

"The Algorithm never makes mistakes," said a woman.

"But it's impossible." He lowered his voice. "If he's one of us. Then Mars is blue."

"Why can't he be?"

"He can't be worthy! Have you seen his eyes?"

"We both know Martian genes are stronger." She said. "His eyes may be different, but he was born outside the womb. He's a Martian, pure or impure."

"Whatever." His voice grew quieter, and his footsteps led away.

The door closed. There was a gentle breathing over him, and he stirred, stretched and opened his eyes. The first thing he saw was a woman in a golden cloak stood over him, the ceiling light formed a halo around her.

"Good evening, Isaac," said the woman, "and congratulations on becoming a Martian Social Engineer."

"Social Engineer?"

"Politician. You're now a member on the Council of Mars. You will make decisions that affect the future of not only our world, but the human race and history itself."

Isaac looked down. His body was wrapped in soft gold cloaks, laden with white flower patterns, a purple belt, and a diagonal cross at his neck. He flinched away, as if they would fall off, but they clung to him. His life would never be the same again, for the colour of the glass distorts the water within.

“Am I dreaming?”

“No.” She reached into her robe pocket and brought out a small transparent ring with a silvery liquid inside. “Put this on for me.”

Isaac recognised it as a ring wallet. He took it, and held it, pressing the hard outer shell, and watching the liquid inside flowing, moving, and vibrating the shell ever so slightly. It was the size of a wedding ring, but ten times the weight.

“Is it mine?”

“Yes. Let’s see if it fits.”

He moved it up his finger. The ring gradually warmed, bonded to him, and came alive, as the liquid inside exploded with bright lights like storm clouds trapped beneath glass. They settled, and a number appeared around it, a one followed by ten zeroes. Isaac couldn’t help but smile, to see himself as truly Martian, just as Grandpa said.

“Good. Now it’s bonded to you. Let’s try palm pulling shall we? Put your palm flat to a surface and think of an object as clearly as you can.”

Isaac looked at her with wide eyes. He had always dreamed of palm pulling whatever he wanted, like Grandpa did. He placed his hands flat against the ground, pictured his sandals, and he gasped as the waves and ripples formed beneath his hand, pushing it upward, gently, moulding together, becoming whole. He lifted his hands and found his beige sandals waiting, exactly as they had always been with their marks, scratches, and imperfections. He frowned. It was easy to forget that everything you owned was a replica. Like Grandpa used to say, real magicians used machines.

“That’s amazing. I can do that for anything I can think of?”

“Yes.” She raised her eyebrows but continued, he is immature for a councillor, she thought, better that I give him the whole speech. “As a member of the council, it is recommended you attend a prestigious social university. You must keep good relations with the highest voting classes. Most Councillors attend Merus- myself included.”

“Is it mandatory?”

She considered for a moment. “It is strongly advised.”

Isaac thought back to when Grandpa had taken him to Sinvent, there was lots of sports, lectures, discussions, all manner of things, but what had interested him most of all

was the Tulthello in the centre of the room. None of them could play it, and none of them tried, because how do you play music with colours?

“Isaac. Are you listening to me?”

“Yes. Sorry.”

“Pay attention. You must always wear your cloaks in public and never in private. That is considered rude. You may be replaced by the Algorithm any year by a more destined candidate.”

“Who will I be replacing?”

She paused. There was a brief frown, but she continued. “If you choose to retire, or one of your decisions is rejected by the electorate, you will become a sept citizen. That’s what we call five voters. Do you understand?”

“I do.”

“Good. If you achieve your destiny, you may halt the aging process permanently. Otherwise, your natural lifespan will be approximately two hundred years. It is recommended to have your organs replaced every fifty.” She collapsed her palmgram. “That is everything- oh, one more thing.” She opened up a zoomed-in map of the city. “Would you like to see your silo?”

“No,” said Isaac, more abruptly than he intended. “Actually- I’m happy living at home for now with my grandad.”

She raised her eyebrows. “Your father, you mean?”

“No. I mean my grandad- Micah.”

Her face puzzled. She turned her back and engaged her palmgram.

“What is it?” Said Isaac. “Has something happened to him?” The waves of his voice grew rough and violent. “Tell me. What happened?”

“Stay calm.”

“Should I not be calm? Hello- tell me. What’s going on. What are all those things on your palmgram. Is that about me?”

“Stay calm.”

“I am calm!”

She backed away and a white car emerged between them from the ground. It had Spheres for wheels, dark windows doors that opened up like wings. There was the Councillor

inside Isaac whom vaguely recognised from the holovision he had asked Grandpa about. Highcroft.

“Isaac,” he said. “Please. Get in.”

Isaac obliged. The doors sealed shut.

“What’s going on?”

“Your father will explain.”

The car set off. Fast, down, into the ground, where a tunnel formed for them. On either side, there could be seen all the others cars making their journeys for the ground was transparent for a mile down to where the city met the planet. Grandpa had never taken Isaac below the city.

“My father? I don’t know my father. I want to see my grandfather. Is he okay?”

Highcroft wrinkled his nose. “Your father will explain.”

They pulled to a stop in some unfamiliar area of the city. The doors of the car opened.

“This is your home,” said Highcroft.

“It is?”

“Yes.”

The car drove away. Isaac turned back to the building; it was three stories, family sized, and made of a silvery grey material with rounded windows that poured bright white light onto the dark street. He walked up and a door appeared and opened for him. His father was sat inside, hunched over a sleek marble table, reading through floating news stories.

“Father?” said Isaac.

The man shot upward. “Son! Oh, son. You’re home. Thank the Algorithm. Thank the Algorithm.”

Isaac stiffened as the man rushed to him.

“Son?”

“Father. I- I haven’t ever seen you in so long.”

The man’s eyes darkened. “Gods. It’s really true.”

“What’s true?”

"Listen to me. You've been spiked. It must have been your Education. Do you remember last wearing it?"

"I do."

"Do you remember it being in this house, or another?"

"Another."

"Then it is as we feared. An underground group has corrupted your Education. They layered artificial memories over your own. This Grandpa you remember, he is no family of ours. My own father has been dead for a hundred years. Tell me- what do you remember? You can trust me, look." He palm pulled a collection of photographs. "See- this is your first birthday, me and your mother. Your second, third, fourth...And yesterday even, your twelfth." And there he was, Isaac and other unfamiliar people his age, smiling and celebrating, and in a palmgram picture – something that couldn't be faked. But until a moment ago, he believed memories couldn't be faked.

"I don't remember any of this."

"What can you remember?"

"Everything. He taught me piano."

"Piano?"

"Yes."

"What else?"

"I don't know. Everything."

"Does anything stick out? Anything political?"

"He told me about Earth."

"What did he tell you about Earth?"

"He said they don't have the Algorithm there. That they choose their own leaders, and jobs, and their possessions are permanent. Things like that. Is there an Earth?"

"Yes. There is. One like you described. Can you see why these choices are best left to the great designer?"

"God?"

"The Algorithm. Earth - where meteorites carrying life chanced upon. It was a miracle, and it was a miracle that was nearly undone. Sapiens are the great extinctions. They

turned the Earth grey. They killed even themselves in the billions. Yet some Martians look upon their small deeds by the few good Sapiens and think that is ample enough to justify their freedom to commit those evils. Do you?"

"No, father. I believe in the Algorithm."

"Good. Good." He turned to the side and nodded his head firmly. "What is your last memory?"

"Yesterday he took me to some place outside the city limits to meet an old martian."

"Name?"

"Silas. He was old. One of the originals. Was he real?"

"Yes. He's a terrorist. A known anti-algorithm, unmartian traitor. Do you know where this was? Could you take me?"

"I don't."

"Think. Remember. See it in your mind. Isaac, this is important."

"I can't. I'm sorry."

His father blinked and took inventory of the situation. He was leaning over the boy, tensed, and his emotional control was on pause. This was no way to behave. No father would act this way. "I'm sorry, son. I am angry they tried to take you from me. It was unmartian of me to become emotional like that. In the morning, some memory surgeons will be round, and they'll remove your artificial memories. You'll be you again. But, for now. You must be hungry."

"I am a little."

They sat at the table. "I'll make your favourite. Tell you what. You print your favourite food- whatever your heart desires. And I'll print what I think- no, what I know your favourite meal is. Let's see if we make the same thing. You'll see. You remember how to use it, don't you?"

"I think so," said the boy. He looked through the glass surface of the table to the food printer below, where the laser needles hung idly waiting over two plates. How had Grandpa used it yesterday? Wasn't it something like this: he put his hand to the machine and imagined the meal. Strawberries, French breads, small dishes of jams, honeys and butter. The needles spun into life: the foods grew on either plate, identical, before each was pushed upward, and the air was filled with a delicious bread smell.

"See," said his father. "You're my son. I raised you. Those... Those unmartian scum who tried to take you from me. They'll suffer."

“Why do they hate the Algorithm?”

“It’s a strange sickness, son. They want great power, the ownership of our society, and of the powers over all life. Such a thing corrupts any soul. That’s why all Martians trust only the Algorithm. It protects us from ourselves.”

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That night he didn’t sleep.

He lay awake staring at the ceiling. Watching the digital galaxies stream by, and the swirls of stars. Were they real? They had been observed, measured and named. If that is how a thing is known to be real. Then, had he been observed, measured and named? There was no way to know. All he knew to be real was what he had observed, measured and named his whole life. Grandpa was a good martian. He had seen it; he had measured the kindness and compassion. But was he real? And even if this was all a lie, could it be believed? Tomorrow, after his memories were fixed, would he be him? The boy thinking these thoughts, was he unmartian? Did he deserve to die? No. No. No.

Isaac put his hand to the ground and pictured a motorbike. Two transparent wheels and a white frame between them grow from the ground. Parts of the bike melted as he sat atop it, flowing and spreading evenly over his body until it solidified into a perfect armour. The bike interfaced with his brain and set off into the ground toward the place. Moonlight falls down through the ground all around, and against its white globe stand the silhouettes of Ton’s moving through the streets. Cleaning the world, starting again, thoughtlessly. The journey was much quicker by bike. His brain as the navigator; he drove away from populated areas and soon found that familiar place. Nowhere.

Everything looked untouched by Martian hands, and the night sky shone down on the rocks. Only one boulder seemed out of place. He found the vault door, and the same flickering bulb, and rapped the pattern on the door, which soon began to open. He stepped inside, and half hoped he could escape into this place, into this person he wasn’t meant to be. Footprints littered the steps on the way down, intangible echoes bounced off the walls and dim light shines around the frame of the wooden door at the bottom. He descended as quietly as he could, pressing his head to the door when it creaked open.

The entire floor of the museum was filled with people seated in complete silence, facing one man in the centre. He stood atop an empty launch pad, illuminated by a bright ceiling light, his voice echoing across the entire cavern.

“Too long has the Algorithm taken from us our free will, our volition and emotions. Too long have we endured the rigid plural voting system. Too long has our impurity been held above us. The time for democracy is coming. The time for the revolution is upon us. And now-as I speak to you. He waits, listening to us. The one we designed. The one we saved from the Algorithm. And the one who will save us. Step forward Isaac.”

The head turned towards the boy. Their eyes shining in the shadows like candles in a dark room. The man paused his speech and stepped down from the platform, making his way toward the boy.

“Welcome, young Isaac,” said the man, “to the Readers. My dear child.” And out into the light stepped Grandpa. He smiled, and Isaac gazed up at him, the man he had known all his life and only just met.

III

They stood beneath a trickling source of water at the edge of the cave. Micah was filling jugs with water as he explained. “It was your idea. You discovered something... something evil about the Algorithm and you knew on graduation day that your brain would be scanned, and the Algorithm would destroy you. We planned this together. You kept up appearances with your Father, designed the memories and we followed your plan. Isaac, you are the leader of the resistance. All that we are today, all we have achieved- is your doing”

“My father said you- we were terrorists.”

“We are terrifying to those who do not believe in free will.

Isaac stared at him. “What did I discover?”

“Ships that fly in strange ways. Out in the deep desert. There, the Algorithm is building an army.”

“Show me.”

“You told me you would say that.”

“Why would the Algorithm do such a thing?”

“It’s no secret how the Algorithm scorns the lower planet. Independence, real independence, would require us to take the moon and kill the old Humans. That has always been an impossibility. Their thirty or so billion, versus our twenty million. Those aren’t good odds.”

“So, the Algorithm is preparing for war.” Isaac raised his voice. “Maybe I could raise it my father, he might listen to me.”

“He knows already,” said Grandpa. “As do the Council. The Algorithm placed them into power because it knew they would place Mars above all else.”

“But it chose me?”

"Another part of your plan. We made you the perfect candidate."

"What else is in this plan?"

"I can't tell you that."

"Why?"

"Because you would try and stop it. You don't know what he- what you knew before. You will learn again."

"Take me to the place in the desert."

Grandpa pulled a necklace out of his pocket and wrapped it over Isaac's neck. "You can't be scanned with this on."

Another gasoline vehicle pulled up and a Martian stepped out.

"Micah," he said. "They're at the vault door."

"Michael. How long?"

"Maybe an hour. We're preparing to blow the staircase. It would take them two days to reach us."

"Excellent."

"And Micah, please. Take this." Michael offered him a metallic instrument.

"What is it?" Said Grandpa. He twiddled in between his fingers, and nearly pulled the trigger until Michael intervened.

"It's a bullet gun."

"I can't use that."

"Your life is worth more than morality."

"They will not harm me, Michael. No machine can kill a man."

"Yes but if they capture you alive. That will be the death of all of us."

"I will bring it." He took it by the barrel and placed it into his belt. "Thank you, and may God be with you."

"You'll need this too." Michael offered him a much smaller piece of shaped metal.

"What is this one?" Grandpa marvelled at it. "A smaller bullet-gun?"

“No.” Michael smiled. “The key to start the buggy.”

“Oh.” They both laughed. “Silly old me.”

Grandpa opened the driver door and sat at the wheel, whilst Isaac jumped in and landed on the passenger seat. Michael leaned in and pointed out the keyhole before, and the buggy soon roared into life as they set off through cave tunnels, finding their way via dim bulbs at the front of the vehicle. Water dripped from stalactites on the ceiling and flowed along manmade grooves in the ground.

“At the council meeting tomorrow- Isaac. There will be a vote for independence. It will need to be unanimous.”

“Another part of the plan?”

“Yes.”

“Do I vote no?”

“No Isaac. You’ll need to vote yes.”

“Why? One vote of no could end the war.”

“It would but only briefly. A hand played too soon is a gamble, but at the precise right time, that is politics. If you vote no, your father will dissolve the Council, become a dictator, and then he is most dangerous to all of us.”

“Then what are we going to do about Earth?”

“We have told them what they need to know. The West will send a combined force to Mars before the machine army is ready. They will occupy the planet and install our members as interim government until a Democracy can be formed and the Algorithm subdued.”

“Democracy?”

“Where the people elect the leaders.”

“Rather than the Algorithm?”

“Yes.”

“Won’t it be violent? What if Martians resist? They might be killed.”

“No more than necessary.”

Isaac gulped and put his reply to his Martian nature. Would it better if he had lied? The result would be the same. The cave grew lighter as they neared the surface till finally the

mouth of the tunnel became clear. It framed the moon and stars, and the picture grew larger until they exited atop a barren desert plain.

"Is it close?"

"Patience. We're driving up Olympus Mons," said Grandpa.

Isaac looked around for signs of the mountain. "We are?"

He chuckled. "Yes and we're nearly at its peak. Sometimes you must see a thing from a distance to appreciate its scale." Grandpa slowed the vehicle, withdrew the key and they stopped. "From here we travel by foot."

Gentle breezes moved grains of sand and covered their footsteps, healing the skin of the planet as they moved along its cheek like a tear. Noise drifted in the air. Too quiet to discern but loud enough to be something significant, something industrial. There was a distant source of light that seeped from the ground up toward the sky.

Grandpa dropped behind a sand dune. His eyes were wide, and he covered their mouths, pointing to the sky. The stars were blocked by dark circular shapes high above. When they disappeared, without any sound or vibration. Grandpa stood up and brushed the sand off his robes, nodding at Isaac's concerned look and they continued walking.

The noises grew steadily clearer. Some form of machinery, rare explosions in a drum like rhythm followed by slight shaking of the ground. They walked as if caught by some trance, wordlessly fixated on the wrinkled lip of the mountaintop, following the source of Northerly light. They stopped a metre from a natural rocky wall that curved upward, shielding behind it the source of light, like the tip of a volcano.

"What you are about to see," said Grandpa. "Is perhaps the most dangerous secret one can possess in the entire Universe. Once you look over that ledge there is no return to blissful ignorance. Many I have shown this place are now with the stars."

"Show me."

He stepped aside.

Isaac reached up and looked over. There was a wide chasm that stretched far on either side, with a slight curvature that hinted at roundness, but the other side was too far to see. Plumes of smoke rose up from below and conveyor belts carried mounds of rock from below. A winding path led down into the depths, crowded by small figures chained together, moving forward each time an explosion rings out. They carried pickaxes over their shoulders. Humatons walked the other way and carry glass spheres filled with an orange substance, not touching either side, that glowed like the filaments of bulbs. Spherical, blackened ships were docked, waiting, and being filled with the glass containers.

"What is that?"

“We’re not sure. It seems to be a fuel. Those glass containers are magnetised, and the element itself has negative mass properties.”

“But there would be... catastrophe if it touched even one positive atom.”

“There is. They mine it from the core, atom by atom, and move it with electromagnetism. Every mistake is an explosion the scale of a nuke. That’s why they’re using slaves. Cheaper than machines to replace.”

“What can it do?”

“Theoretically? Time travel, wormholes, faster than light engines. We believe the fate of the worlds may depend on it. We need to stop them before it’s too late.”

No sooner did he close his lips than Isaac noticed the deadly silence. He peered over the edge of the chasm when a hot laser flew past, scathing his face and leaving a bruising sensation.

“Run, Run!” Grandpa pulled him from the ledge, and they broke into a sprint.

Humatons climbed over the edges of the hole, carrying laser rifles with them. Lasers flew at them from either side, invisible to the eye, but when they landed on the sands they blackened it and created steams of mist.

Grandpa struggled to keep up. Isaac pulled him forward and they cowered behind the first dune they passed. They looked over and saw twenty porcelain figures approaching, alternating between firing and moving forward.

“Grandpa, are you okay?”

“I’m not going to make it. I’m too slow. You should leave me here. I can delay them.” He pulled the bullet gun from his waistband. “Tell the others they’re safe. I won’t let them capture me alive.”

“No grandpa, don’t be a hero.” Isaac yanked it from him and held it over the ridgeline, focusing and using his learned surgical skills to steady the barrel at the nearest Humaton some fifty feet away. He squeezed the trigger and it ringed out loudly, launching a metal projectile into the glass head of the machine. It exploded like a firework trapped in a barrel.

The other machines reacted in an instant, lowering themselves beneath the small hills in the sand and launching smoke canisters. Thick plumes rose and separates them.

“This is our chance,” said Isaac. “Lasers don’t go through smoke.”

Grandpa clutched his stomach with a hand. The smell of burning flesh in the air. Sweat trickled down his brow and round his wide eyes. "My clock is ticked. The stars call me. I hear them. So softly. They sing." He smiled and looked upward in a daze.

"Stay with me. Keep your eyes open."

Isaac put more bullets down range, through the smoke. Another glass head exploded twenty feet away whilst the sounds of bullets bouncing off porcelain rang out. Finally, the gun finally clicked and stopped firing no matter how hard he pulled the trigger.

"It won't work. How do I charge it?"

"The magazine is empty," said Grandpa with sobriety. "I told you to run."

"I thought I could save you."

"You did. They wanted me alive."

Gentle vibrations shook the sand.

"Will they kill us?"

He chuckled. "A machine could never kill a man. But you'll wish they had. You'll die a living death. My mind is too great a risk for them. You should kill me. Come. Round my neck." He grabbed Isaac's hands and put them to his neck. "Squeeze. Squeeze hard."

"No." He pulled away. "No. We'll make it out of this."

"Your father might let you go. Tell them I took you against your will. Dragged you here but you didn't see anything. Just some crazy rebel. Crazy rebel. Yes, yes. That'll do it."

"No. I could never betray you."

"You should. There is no need to be loyal or to love the dead."

"I still love my mother."

He looked at Isaac and nodded his head slowly. "You do. Yes, you do," he rocked back and forth, his voice began to weaken. "You always do. Always will. Always..."

Isaac caught the glint of moonlight on metal in the distance, realising it must be the buggy they left behind. How close they were, yet so far. More glints appeared and the shapes of dozens of them grew onto the plains, filling it with the sight of manned buggies.

"Grandpa. Grandpa." He shook him till he opened his eyes. "Look!"

They heard voices. Scores of them, drifting over the sands. "Five of you hard left, you five right. Rest of us drove onto their position – use the buggies to make a wall. All clear?"

“Michael.” Grandpa croaked. “Is that you? I told you we’d be fine.”

“Yes it is old man,” replied the voice. “And how many times have you been wrong?”

Grandpa smiled but the colour drained from his face.

Isaac stand up but Grandpa tugged his leg.

“Isaac,” he said weakly. “Council Archives. Your mother. Look...” His eyes close and he drifts off.

“Grandpa? Grandpa. Stay with me.”

Buggies drove over the ridge and skidded on the sand, forming a wall and a few dozen Martians clambered out wearing reflective metal armour. They carried bullet rifles and mounted on the ridges, firing into the smoke. Michael stood over them both. He reached down and took a close look at Grandpa’s wound.

“He won’t wake,” said Isaac.

“He’s unconscious. It’s not fatal.”

“Are you sure?”

“Yes. Do you hear that Micah? You’re going into shock old man.” He lowered his voice. “Don’t worry, I’ll look after him kid. You need to get out of here. If the Ton’s get a drop of your blood they’ll ID you and then it’s game over. You’re too important to the cause.” He threw a key. “Once we handle the Ton’s we’ll get him to medical.”

“There’s a lot of them. I counted twenty.”

“Twenty.” He smiled. “You think we can’t handle that? Don’t worry kid. Lasers bounce right off. Now go. Get out of here.”

I climb in and slide the key into the hole, twisting it one way then the other. The engine starts and Michael points toward the caves, shouting at me to leave. I press down on the pedal and set off, fighting against the loose sands, and keeping the wheel steady. The engine masks the noise of gunfire, but their voices remain in my head, blending together, till one crystalises and stands above the rest.

“Cover me. I’m reloading. Michael. They’re trying to grab me! Ah- it’s got my foot. Michael.” His voice is thick with fear, breaking and growing hysterical. “Don’t let them take me, please don’t let-” His voice cuts off in an instant.

Another takes centre stage. “There’s too many of them. There’s too many. I’m out of bullets. Someone get me, Ignis, shoot me-”

“Me too.” Says a woman. “Someone. Please, quick-”

Once I grasp the controls and set the buggy in a straight line, I look over my shoulder. The smoke begins to clear and thousands of Humatons appear surrounding the few dozen Martians who cower behind the buggies and ridges. Bullets ricochet and bounce off their porcelain hands, some find gaps and hit their glass, igniting them but more take their place. The Martians recede into a smaller circle.

"There's too many of them."

"Keep firing," says Michael. "We can take them. Keep firing."

"No Michael." There was a lull in the firing. "This is it."

Machines constricted their formation, closing in and accepting their gunfire, ripping the buggies away and hiding their glass heads behind metallic hands.

"You're right. I'm sorry. It was an honour. Clockwise. I'll go last."

They turned their guns on each other, firing one by one, until the sounds of gunshots simmer down, and silence stands alone in its place. The machines turn their heads toward me, and I press down the accelerator.

Behind their figures, emerges a black spheroid ship, and I put the pedal as far down as it will go. Its above me in an instant. The light of the skies and moon disappears, and a shadow engulfs me. Humatons drop from the ship, hitting the ground on either side of me with a thud. They break out into full sprints toward me.

"You're nearly there," called a voice, "keep driving. Keep driving."

I weave between them, throwing the steering wheel in all directions, and they fire their guns, Precisely hitting every wheel, melting, and deforming their metal. They jump in the air and latch onto the vehicle, digging their fingers in before I swerve into mounds of sand, and they fly off.

The cave entrance wraps around me, and the buggy breaks down, spinning round and stopping. An explosion rings out, and rocks fall down into a pile of rubble, crunching the robots beneath. One pulls itself out of the rubble, his lower half broken off, moving the mass from its torso into a syringe needle. I back away, hitting the wall of the cave, and it reaches out to prick me until a bullet fries it's brain.

"Isaac?" Said a young Martian woman. "Is that you?"

He looked at her blankly.

"You don't remember me, do you? Oh Isaac. You told me this might happen." She holstered her gun, walked over and embraced him. "My name is Ava. I was your friend. It's alright Isaac. I know you have emotions. I do too. We're both half Sapiens."

There was a bright flash from his ring. He looked down and saw the number rise from ten billion to the trillions. Grandpa must be dead, and he had inherited his wealth, and the responsibility of the resistance.

V

Ava and Isaac sat at the back of church. Beneath a tall, diagonal cross was the Altar of the Algorithm, occupied by a Humaton who read Algorithmic scripture. Isaac sat uncomfortably on his gold cloaks, and other Martians cast curious glances at the sight of a Councillor. He didn't want to be there, but Ava said it would look suspicious if they skipped scripture. Isaac's father

My gold cloak wraps under me uncomfortably. I'm still getting used to it. Other Martians sit far apart from us, casting glances but looking away when caught. I didn't want to go but Ava says it would be suspicious if we skipped scripture.

"Everything you need in life is deserved," it reads. "The Algorithm ensures all that is needed is provided to each and every Martian. For this all Martians are thankful."

We bow our heads forward, touching the back of the wood, holding still, and leaning back before the machine continues.

"The greatest achievement for any Martian is to be destinate: to achieve their destiny. Today we will be learning about Maya, citizen of Asimov, who stopped aging after achieving her destiny yesterday in genetic research..." It trails off, into her story, whilst I turn to Ava.

"I can't believe they're all gone. I should have done something. Maybe the Ton's would have let them go if I uncloaked and they saw me."

She shakes her head. "There was nothing you could do. Like you said, there were thousands of them. Too many. It was an ambush."

"I should have tried. At least stayed with them."

"And been killed, or worse, identified? No. You have to live. You're more important to the cause than you realise. We can find more engineers, programmers, even actors... But a Councillor? Isaac. People will listen to you when the fleet arrives. You can keep the peace."

"I hope so."

We tune back into the Ton's teachings. "Martian morals were carefully engineered to preclude the worst Sapien dispositions. The hoarding of wealth by Sapiens known as trillionaires is but one infamous example. In 2095, Earth rejected Electralism and became owned by a conglomeration of corporations in what's known as the Acquisition..."

Ava kicks my feet and whispers. "Hey. Why don't we get out of here?"

"You can't just leave a session." I look away and then jerk back. "Can you?"

"As if they'd stop you." She rises and Martians look over at us. "Come on. Let's go." Ava pulls my arm and leads us out of the church, into the empty street.

"Ava!" I catch up with her. "This will be all over the morning news. I could be in serious trouble for this."

She faces away, holding her palms to the ground. "You think they'll run that over the immigration stories?"

"They might."

She turns to face me, shaking her head, whilst a motorbike forms behind her.

"No. I'm not riding that. No way. It looks like it's from the digital revolution."

"Closer to the industrial revolution," she says with a smile. "Come on. It'll be fine. I'm a good driver and you can wear armour if you want. I won't be offended. Promise."

"You're driving manually?" I put my palm to the ground without hesitation, which reaches up around me, solidifying into a transparent protective suit. She mounts the bike, with a helmet forming about her head, and I sit behind her.

"Comfortable?"

"Yes."

She leans forward, blue signals pulsate through the helmet, and we set off into the ground. The bike heads straight toward the city edge, where the sub-city runs out and hard rock wall begins. She makes no attempt to turn away as we approach.

"Where are we going?"

"Outside the dome."

"No but really." I feel fear rising in my voice. "Where are we going? Ava? Stop Ava! You're going to hit the wall. Ava-"

It comes closer, and I turn my head, bracing for impact. But the bike continues up the wall, which I now realise is sloped upward, and we surface outside the dome.

"Oh."

She meets my eyes in the mirror. "How did you think anyone left the dome?"

"I assumed by ship."

“And sat in traffic?” She smiles. “Like machines do?”

“Where are we going then?”

“You don’t like surprises, do you?”

We ride along the tops of desert hills, skirting on the fine edges, atop valleys and chasms that make the hairs on my neck rise. My hand moves to itch my shoulder and I flinch in pain, realising the heat of the sun has been absorbed by my sun suit. The wheels of the bike are razor sharp and cut through the rocks, slicing them into halves, crunching the smaller ones too and leaving a thread behind us in the sand. Before long we reach a cave entrance at the back of a mountainside. Ava stops the bike and dismounts, I follow her.

“Is this the place? Ava?”

She wordlessly enters the darkness and I run to catch up. Light flicks on around us, emanating from bulbs above us, looped together by wires, and at my feet I see carved steps that lead up the cave. I catch her hand leaving a switch.

The smell of salt encroaches my nostrils, more and more, as we ascend. There’s a chirping too, familiar but for an unfamiliar reason. Wind blows through the cave and natural light overpowers the bulbs as the steps run out. We find ourselves on flat ground, looking out to the world. Mountains wrap around the valley, hiding it, pocketing it from Mars, man, and machine.

There is a lake. Water, real water, filling a massive space, just like my learned memories told me Earth was once like. Thimbles of grass grow at the outskirts. Small, winged creatures nest on the cliffs, making noises before they send down across the water, and every so often a fish breaks through the surface.

Ava stands at the edge of alcove, and I join her side. I watch her expression, stilled, with ripples of red beneath her cheeks, and turn back to the lake. Watching those same ripples, as the water blushes with waves. One lone tear trails down her cheek, and splashes on the ground.

“This is amazing,” I begin. “It’s like Earth before the wars. And a find like this, a surface lake, Ava. You could be given votes for this and become a red belt too. Daniel will be shocked when he sees-”

“No!” She startles me. “No Isaac. They would destroy this place and all its riches. For what? Profit and greed.”

“We don’t have money, Ava.” I use a softer tone, attempting to ease her hard expression. “There is no profit or greed without money.”

“Money doesn’t cause greed, greed causes money.”

“Electralism has no room for greed.”

“Or beauty, either.”

“Well, doesn’t Earth need this water? Isn’t that what the resistance is about?”

“They don’t need water. They have plenty. They just want more for their hydrogen weapons. What they want shouldn’t come at the expense of what I need. I’ve done enough for Earth. This is my place. It found me as a child. Can’t you see how perfect it is?”

The wind blows through my hair, and I drink in the cold air. “I can.”

“I brought you here because it taught me about life. Those birds up there, they eat the fishes down here. And those fishes eat smaller fish who in turn eat the plants. And it happened all by itself. You could say this is the first discovery of alien life. We didn’t bring that life to this planet. I nearly told my brother once and now I see it would have been a mistake. We don’t value life because life is a cycle, with a beginning, middle and an end. Humans want to spread to the stars, to more planets without end.”

“You don’t think we should settle the stars?”

“Not as we have so far. We should respect the other miracles of the universe. With mind comes morality, with brilliance comes burden, with consciousness comes conscience.”

She speaks to something elemental, something deep within me and it speaks back. “You’re right. I didn’t see it before. I didn’t mean to sound so...”

“I know. Your education taught you those things. You’re very intelligent. That’s why you were chosen as a Councillor, but you’re kind too. I know you are. I saw the way you looked at that boy on robe day when they dragged him out.”

I see his bloodied face and blink it away. “What will it be like? When their ships come? How different is Democracy to Destocracy?”

“Democracy values the body and mind. Destocracy values the mind alone. Somewhere along the way, the work of machines displaced the work of the body and soul. Let me show you something.”

She pulls out some books from cracks in the wall and brings them over. “Your grandfather was arrested for printing these to give to me. I think it’s only right I share them with you.”

I look from her eyes to the strange symbols on their covers, realising now they are clear to me, sequencing and translating into my thoughts. Shakespeare, Plato, Chaucer, Dostoyevsky, and other unfamiliar names.

"You don't know them, do you? He said you might know this one." She unfolds some parchment, scribbled over with musical notes that I recognise.

"Beethoven. Of course. I have played his music since I was a child." I pause. "He wasn't a Sapien, was he? No. He can't be." There is a strange combination of emotions at the thought. Could a Sapien could write such beautiful music when they are themselves so violent? Or that my weakness, my hamartia, may not be so after all. It's hard to process.

"He was."

I hold the books between my hands, flicking through their pages and reading their language. Stories take shape in my mind's eye; people I have never known grow from the page, until it's all too much. I close the book and set it down.

Ava takes my hand. "This is what the resistance is about Isaac. Returning to Eden. Imagine Mars without machines, or at least without the Algorithm, everyone would have one equal vote. We could fix our DNA. Bring back evolved emotions." She looks up to the sky. "Two months. Their ships will come, and they will set us free."

"Who will lead us?"

"Politicians, like they do now but elected by the people not chosen by the Algorithm."

"Will we still vote on all their decisions?"

"No. We will trust them like how I've trusted you in bringing you here."

I want to believe her, but when I close my eyes, all I see is war.

VI

In the end, I did decide to go to Merus, just to see what socialiversity was all about. I know Ava wouldn't approve, but what does she know about it? She hasn't been herself. Besides, if it's not for me then I'll only go just this once. Plus I should take what Ruth said seriously; it's important for a Councillor to fraternise with the higher voters.

Merus is a large building, on the outskirts of the inner city, built like a cathedral. My education covered architecture, and it seems like a combination of Baroque and Gothic from the 12th and 16th centuries. The design is said to be inspired by the old Sapien universities, when they existed, before the Acquisition.

There are people, coming and going, in groups of three or four, and all with red belts, though an occasional Councillor comes in their gold cloaks. I contemplate entering for a while, aware of others watching me, and recognising me from the news, but my uniqueness and fame is less impressive here.

“Isaac?” Says a voice from behind. “Is that you?” I turn and find Daniel with two other Septs in their red belts.

“Daniel.”

“That’s amazing! It really is you. Guys, this is Isaac. I met him on graduation, and I’m sure you know him too.”

One of his friends, a tall female with short brown hair, smiles and takes my hand. “Oh yes. Our newest Councillor. How good it is to finally meet you. You can call me Beth.”

“You too. I mean, my name is Isaac. Good to meet you Beth.” I nod my head down slightly, signalling my respect much to her delight.

The other five voter is older by a few years, and he seems mildly annoyed by my shaking her hand and quickly offers his own, firmer grip. “Not heard of you before.”

“He hasn’t had a chance to make his mark on the world, Leo” says Daniel. “But I’m sure he will. Look how tall he is. You know there’s some purity in those genes.”

“His eyes are blue,” Leo remarks.

“Yes,” agrees Beth. “That is exquisite. I didn’t know the genome clinic was allowed to do Sapien colours. I asked for purple and they said no.”

“They’re natural,” I reply, offering no further explanation.

Leo looks me up and down. “You’re not a womb baby are you?”

“No. Cultivated.”

“All the more exquisite then,” says Beth. “You are unique.”

“Shall we go inside?” Offers Daniel, perhaps aware of our small and growing audience. “It is cold today.”

“Let’s,” says Leo.

He leads us in. There’s a wide hall entranceway, with a carpet floor that’s red in the centre and darker swirls of purple and black elsewhere. There are winding staircases, corridors, mahogany wooden beams, and chandeliers carrying torches. We move down a corridor, and on either side there are occupied rooms with armchairs round fires, filled with loud Martian discussion. In one they sculpt marble statues; another they paint on canvases, but we stop outside a room filled with instruments.

“You like music, don’t you Isaac?” says Daniel.

“I do.”

"I've found I enjoy it too."

We step across the threshold, which rearranges as Daniel manipulates it with his palmgram, and we sit down on four stools behind pianos, facing one another over their tops in a square formation.

"What should we play?" Says Beth. "Chopin, Debussy, Beethoven?"

"Not Debussy again," says Leo, "how about Chopin today?"

"Isaac?" Daniel turns to me.

"Chopin sounds good to me." I flick through my memories. "Nocturne 9, 2?"

Daniel smiles. "I like that one. Good choice Isaac. Would you like to start?"

"Sure." I tap a key, but no sound comes out, I tap it again, and again. It presses down and vibrates, but no note is played.

"What are you doing?" says Leo, narrowing his eyes at me.

"It's not working."

Beth leans over. "You have to choose to hear the music, on your palmgram."

"My mistake." I open up my hand, accepting the music into my ears, finding the keys, and pressing them down. I close my eyes and enjoy the gentle resonations moving from the piano strings up my fingers, hand, wrist, and heart.

Beth's voice floats to me. "You play with your eyes closed Isaac?"

My eyes shoot wide, and I look at her, feeling my cheeks rosen. "It's an old habit."

"Let me try." She begins playing, to my tempo, and harmonising. "This is great. You can really feel the music this way. The best discoveries are accidents."

Daniel watches on and joins in, following suite, with closed eyes. We all harmonise our keystrokes, and Leo finds his place soon after. I never could have imagined this going so well, and Daniel of all people being so musical. I mistook him, maybe Ava did too.

"So, Daniel." I muster my confidence. "What career did the Algorithm award you?"

"I'm an Astroidologist, surprisingly. I am ranked 20th. It does make sense though. The Algorithm knew I never wanted to be a soldier; that I was only aspiring to be my father. Destiny isn't something you can inherit."

"Do you enjoy it?"

“Very much. I’m working on a Chondrite collector. It’s the most overlooked asteroid because it’s the smallest and most abundant. Miners all want the glory of taking home a large metallic asteroid, but these days metals are worthless. Really, we need carbon more than any metal.” He cuts himself short. “Sorry. I don’t mean to ramble.”

“No.” I shake my head at him. “It’s all very interesting. Do you think your work on Chondrite asteroids will be added to the total education?”

“One day.” He smiles. “That would be an honour. It would have to be something fundamental to be added to the education. I’m not sure people care about asteroids all that much.”

“You’re too hard on yourself,” says Beth. “Asteroids are awesome.”

“Thanks Beth, I’m sure you prefer acting though.”

“Only by a hair.” She winks.

“You’re an actor Beth?” I cut in. “Do you know Michael?”

“How could I not? He was the greatest actor of the third generation. He was ranked first for neigh on thirty years. Terrible shame about the accident. What are the odds of a sub-city tunnel collapse? Awful.”

So that’s how they handled his involvement in the resistance, I realise. The embarrassment of such a prolific celebrity being a traitor was swept under the rug.

“Zero,” says Leo. “I work with matoms every day in my field. Never seen one malfunction.” He conjures a flame from the table with his palm. “Not once.”

“Strange,” agrees Daniel. “Must have been human error.”

“He never did like machines doing things for him,” says Beth. “Did all his own acting. If he got something wrong he hated if they corrected it on the computer. Insisted on doing this thing called takes, where you keep redoing the performance it over and over. Doesn’t surprise me he didn’t let machines drive his cars either.”

“What is your work, Leo?” I ask.

“Only my friends call me Leo,” he replies but Daniel glares at him. “I work in CMAS, complex machine atom structuring. Basically, we’re improving the ability of the city to create moving, complicated objects like fountains. They’re a real challenge.”

His lips close just as we finish the piece, leaning back and looking at each other, impressed by our unbroken harmony. The pianos reform into antique coffee tables with lamps, and the stools become cushioned armchairs.

Daniel palm pulls us four drinks into brass goblets. "Have you tried the Merus tonic before Isaac? It's a rite of passage here."

"Not yet. Is it alcoholic?"

He laughs in a way that reminds me of the Daniel I knew before. "It's just flavoured caffeine. Alcohol is for the lower voters."

I accept a goblet and take a sip, wincing as it tracks down my throat.

"They say without caffeine, Sapiens only invented the wheel," says Daniel. "And even that is disputed. Imagine what Martians could achieve."

Beth drinks half of hers in one go. "It's in the morning drinks isn't it?"

"Only a very low dose. The Algorithm doesn't like us having too much."

Leo finishes his entire drink. "Why?"

"There isn't enough work for everyone as it is," explains Daniel. "If we any more productive, we'd be bored. I only get to work weekends."

"Maybe," I begin. "We should settle more planets. We'd have a lot more to do."

"We haven't even come close to populating Mars yet." Daniel pulls up a map on his palm and counts them. "Two, four- Twelve cities? There were Earth countries with more than that. There's no need yet."

"We should build them faster then. Much faster."

"Maybe you," says Leo pointedly, "should tell the Council to budget more electricity for city projects. That is your job after all. It's only ten trillion watts for a new city. The reserve has a hundred times that just sitting round waiting for doomsday."

"No," Daniel interrupts. "If we built any more cities, and filled them, we would have even less work to go around."

"What if," I pause, and they look at me. "Actually, forget it. Stupid idea."

"Tell us Isaac," says Beth. "It can't be that stupid if you thought of it."

"Okay." I take a deep breath. "How about if we saved Earth. They're always fighting wars. They have all their outdated systems. And there's what? Twenty something billion of them, all relying on us. Maybe we could help them be better. Be more like us."

They all look thoughtful till Daniel laughs. "That was a good one."

Beth joins him but Leo still looks thoughtful. "You weren't joking, were you Isaac?"

"No," I admit.

"I agree with you," he says. "I think that's a noble idea. They did create us, after all. If Earth wasn't such a disaster, and maybe Sapiens were more... Like us. If they listened to the Algorithm, and allowed Humatons on their planet... They could settle Venus. The gravity there is too strong for us anyway."

"Venus would be wasted on Sapiens," says Daniel. "Better the Algorithm writes another new genome for it. One like us, or better, somehow-"

"Wouldn't we then become the Sapiens?"

Daniel sees checkmate, and so does Beth, but Leo finds it amusing.

"You'll be a good councillor," says Leo. "Isn't your first meeting tomorrow?"

"It is."

"You had better be going then. You won't sleep well tonight for the stress of it."

I check my palm and see the time, two hours till sundown.

"I'll walk Isaac out and be back after," says Daniel.

I spy a handful of gold cloaks on our way, knowing I'll see them tomorrow, wondering what their duties are to our world.

"It's so good to see you Isaac. I'm glad fate crossed our paths."

"Me too. There's one thing I've been meaning to ask... Your sister came to see me."

"Ah, yes. She came to see me too. Did she do the whole meltdown with you too?"

"Meltdown?"

"Yeah. Knocked on my door and screamed at me about how the Algorithm was unfair, and how I must think I am better than her or whatever because I moved out."

"Do you?"

"No," he says abruptly. "Obviously not. She's my sister. We were made from the same parental gene synthesis, and I'm sure she's very pure, but I just want to have my own identity. You know? Be my own person, find my destiny and hopefully achieve it."

We reach outside, and a few street goers widen their eyes at us. Daniel pulls a lumbrella from the ground and hands it to me. "You can never be too careful with the dark."

"Thank you." I bow my head, slightly, to bid him goodbye and he does the same.

When I turn around and palm pull my car, something in me feels decided. I know, somehow, that I belong in Merus, but that I equally do not. Maybe our society is imperfect, but Sapien society is hardly perfect either. I don't think replacing one with the other is the solution. Why does the resistance hate the Algorithm so much? It saved humanity. Sure, it has killed some rebels, but they are happy to kill innocent people to instil Democracy.

VII

We sit around a large oak table in the Council hall. Fifty people exactly, each seated on wooden chairs, wearing their golden cloaks, purple robes, and diagonal crosses. Some I recognise from Merus, they nod their heads at me, and I do to them too. We all watch the large oak doors behind the empty seat at the helm of the table.

In the middle of the room, there is a floating hologram of Mars that rotates, showing our few cities and the steady lines of space lorries coming and going. I could watch it for hours, and I look forward to seeing it in future meetings, but I can't stop wondering what my role is to be as Councillor. When I look at the man on my right, my palmgram tells me he is the Head of Agriculture, and to my left sits Ruth. The Head of the Treasury. What will I be?

"When he comes in," Ruth whispers. "you need to stand and sit only when he has sat. He will announce your title, hear all monthly reports, and then he will make his motions."

I nod and sit up straight. Most Councillors seem distracted by their palmgrams, reading through their speeches. Will I be expected to make a speech?

"Ruth, will I..."

The doors burst open, and my father appears. Everyone stands up in unison, flicking their hands to their sides and bowing.

"Sorry I'm late," he says. "Please. Be seated." He shakes his head when we all remain standing. He pulls his chair back and I notice his red velvet cushion. Mine is wooden.

"I hope you have all had a good month. Let's begin, shall we?" The moment he is seated, everyone follows suit. I do my best to mimic Ruth.

He places his hand to the table and pulls out a scroll, opening it and placing it before him. "First we must welcome our newest member from this year's graduation. Isaac. The Algorithm has awarded you the honourable title 'Head of Peace,' and the duty description reads 'never wage war when words will suffice.' Congratulations." He claps, and the room follows suit. Five places over from me, a man quietly stands up, his cloaks fade back into white robes, and he leaves. Nobody seems to notice.

"Let's hear the reports. Ruth, would you begin?"

"Certainly, sir." She stands and holds her palm to the table.

The projection of Mars is replaced by the Moon. Nuclear factories sit across its surface, covering nearly every inch. Spinning wheels catch and launch lorries off into orbit, carrying enormous vats of charged battery fluid.

“The moon produced approximately one million Terawatts in the last standard year. We had a strong year of trade, and our share was 61%.”

The Hologram changes again, showing two identical dome cities built along the equator. They have tall white buildings clustered in the centre, countless silos laid out with hyper tubes and vegetation. But there is not a soul to be seen.

“The Treasury invested in constructing two new Martian cities.”

She swipes her hand, and the hologram zooms in on the largest white tower of a city, inside there are rows on rows of artificial wombs growing babies. Some are motionless whilst others move their limbs about, searching for a Mother’s heartbeat. Humatons stand watching them in the aisles; their brains glowing with intense focus and thought. The sight of them makes me want to run. I still my shaking hands under the table.

“For the next generations to enjoy.”

My father smiles when she changes the hologram again. Black cube and sphere-shaped craft appear from the mouth of an orbiting factory, moving down, and joining a small group on the desert surface.

“We invested in new technologies.”

She moves her hands apart and the hologram splits into many separate images. Nothing about them seems unusual, Martians put their hands to walls and palm pull objects like cars, clothes, and cups.

“Efficiency improvements across the planet saw our electrical consumption decline. But this year, the colony tax was increased.” She pauses and takes a deep breath. “To one hundred thousand Terawatts.”

Whispers around the room break out, louder and faces turn to each other with shocked expressions.

Highcroft stands up. “One hundred thousand trillion watts? To feed their planet. Earth is bleeding us dry!”

The noise of the room erupts and pours in every direction, till I can barely hear myself think.

The numbers seem beyond comprehension to me, but I recall that a cup of tea costs two hundred, a car two hundred thousand and my Daniel told me his Silo costs fifty million a month. I see why Ruth was so nervous. That’s a lot of tea.

“Silence. Silence. Order in the Council.” My father slams his fist on the table and the room quietens, though he looks as angry as any of them. “Thank you. Please, continue Ruth.”

“The Treasury has maintained its contingency rate of ten percent, making each Martian’s annual share fourteen billion watts. Though, the projected cost of living this year is down to four billion watts.” She sits down and I take that to mean she is concluded.

There’s a silence in the air until my father rises a few moments later. “You’ve done an excellent job this year, Ruth. Abundance continues despite the attempts of Earth.” He gives her several loud claps, but his face is hardened. “John. How’s the asteroid mining?”

The bald man from the other side of the room stands up and places sheets of paper on the table, covered with those same symbols from the library. How strange it is to use written language. “My pleasure, sir.” He reads with a gruff voice from his papers. “Space pirates from Earth were a constant hinderance. They were at our necks all year-”

My father interrupts. “Just the numbers and visuals, John.”

“My apologies sir.” He raises his hand to the room and flicks through scenes of ships orbiting asteroids, breaking them up with lasers and explosives before swallowing the pieces. “We mined twenty million metric tons of Iron, eight thousand metric tons of cobalt and two million metric tons of lithium. Our strongest year to-date.”

“Good, very good. Water. Evelyn?”

“Sir.” She rises to her feet. Her hair is bright orange, which surprises me, a rare gene amongst both Martians and Sapiens. The first I have ever seen in person. “We sold nine trillion litres of water to Earth in the last standard year sir. Water remains our most profitable export.”

“Earth Affairs? Peter?”

Peter, a narrow man, rises to his feet. “We haven’t had contact with Earth for two days due to a global storm. It is expected to last another three days.”

“Very well. Unless I am forgetting anyone, I believe that is all we had scheduled for this month. I’m sure the electorate will be pleased by all our progress. And that brings me to it. My motions this evening have been inevitable for some time.”

My father places his hand to the table and pulls out another scroll, which appears before us all to read as he narrates it.

“I submit to the council the following motions. First. To create our own artificial Moon for electrical production and to crease all trade with Earth.” The room becomes vocal, and he raises his hand for silence. “Second. To ban all Sapiens from the planet to prevent genetic degradation. Third. For Mars to declare, at once and on this day forever more, independence.”

Peter rises to his feet. "Sir. Earth will never allow it! It violates every clause of the Versailles treaty!"

"What of it, Peter? That treaty was signed by a colony with its hands tied. We needed their electricity to survive. It was not an equal bargain."

"Sir. We owe Earth an endless debt."

"Do we, Peter? What do we owe them?"

"For creation. Without Earth there would be no... us. They created Martians in their own image. We cannot abandon the creators. They survive on what we provide."

"Well, Peter. It seems they have already decided to abandon us."

"They have?" There's a tone of hurt in voice.

My father raises his hand to the central hologram. It shows an enormous fleet of unfamiliar ships on the ground. There are cannons on their underbellies, conventional weapons too, and thick armour plating everywhere else. Legions of Sapient soldiers fill them up, the last few trailing in and the hangar doors closing. The engines fire up and shake the ground as they rise, leaving the atmosphere and joining an even larger group in space. More than I have ever seen.

I recognise have been used, a pawn in a game, by my father. He knew I would tell Grandpa about his motion who in turn would tell Earth. They would never have launched their fleet without me, and there would be no basis to persuade the Councillors to vote for independence otherwise.

"It appears Earth has decided they no longer wish for us to be a separate society. Espionage suggests that they intend to install Sapient systems of government, and even fulfil the original plan to make our planet a sister Earth for them to live and for them alone."

He turns his hand again, swiping back to the new Martian fleet from earlier. Glass warheads with glowing orange interiors are carried by Martian soldiers onto black cube ships.

"We have equipped our ships with new technologies. The war will not be lost."

I stand up and face the room, their faces turning to mine. "How long do we have?"

My father tenses his jaw. "They arrive in two months, but we will meet them sooner."

"Give me a week. I will talk to them and keep the peace. They have made a human mistake." I shake my head. "There is no need for war."

“There is no need to delay what is inevitable,” he raises his voice, “they have chosen their course and will not be deterred. Earth’s fleet must crash against our cliffs before the lighthouse of a negotiated peace finds them. War is-”

“There is no war yet, father. Not where words will suffice. You told me so yourself.”

“Tell me. What will your words do?”

“Give me a week and my words will negotiate a peaceful independence. There is no need for the stain of blood and death on our first chapter as an independent planet, does there father? We must be the better beings.”

He takes a deep breath and surveys the room. “I give you three days. No more.”

“That is enough. I will make peace.”

“We will send you to their planet under the white flag and if they take you hostage, we will rescue you at wars end. If they kill you, then I will mourn for you. But if you succeed, you may save the lives of many souls. Some less worthy than others.”

He makes his way into the middle of the room, where the hologram once floated, and now he stands, looking at each of us in turn.

“I ask you all to support my motion. To pledge your confidence to in me as the bridge between mind and machine. I have consulted the Algorithm and see a path for us to tread. The light of life must be cast in every dark corner of the Universe. Place your hands on the table and cast your vote on the motion for Martian Independence. We will settle the stars.”

I place mine first and settle my thoughts on yes.

Hands stretch out from around the room and find their way onto the table. Councillors look at each other, then at me, before turning to the table and each making their own moral quests through the valley. I see it happen on their faces. They come out the other end unsure but realising the mountains are impassable.

The vote is unanimous. Ruth tells me that the electorate will confirm or reject it, usually a majority is found within the hour. We watch on the central hologram as affirmative votes flood in. I notice the more votes a person has, the more likely it seems they agree. I look at my palmgram under the table, seeing ‘Independence’ catch fire in the news. There is a certain relief knowing I am no longer the focal point of media attention.

“There it is,” says my father. “Mars is now an independent planet. We will begin construction of the artificial moon at once, relying on our battery reserves till its completion. All trade with Earth is to cease. All trade ships are to turn back and be refitted for planetary settling. All Sapiens are to be deported. These are your tasks. You are dismissed.”

Councillors file out of the room from left to right; their diagonal crosses bouncing as they walk and cloaks trailing behind them. Their faces are set in stone, much like their hearts I suspect. When Ruth stands up to leave, I see the same determination on her own face. My father sits back in his seat and calls to me as I stand.

“Son. Stay a moment. I would speak with you.”

The doors close and we remain alone. Our seats at opposite ends of the same table, as far apart as can be. He opens his posture and relaxes his voice.

“I don’t want war either, son. It isn’t in our nature.”

“Then why build an army? You knew this would happen.”

“I feared our freedom would come at a cost.”

“Not one you will pay. War made by politicians is like love without affection.”

“Nor will our people pay. If we inflict a single defeat on Earth in space, then we will avoid full scale planetary war. They will be once burned, forever shy.”

“Did the Spanish send one Armada? No father, they suffered a defeat and sent two more. If Earth tries again, it may be our planet that is burned.”

“You omit that those Armada’s failed too, Isaac.”

“And the war persisted. One Armada or three, it seems there was no gain from any of it. It would have been just as useful for there to have been none at all.”

He pauses. “You should leave. Highcroft will take you by ship. Our new engines are much faster. You will arrive by the morning. Can you speak their ways?”

“Yes. I have practiced.”

“Then be warned. Their politicians are not to be reasoned with. And should you find the CEO. Well, he is not to be reasoned by. May you find your destiny, son.” He rises from his chair. “Wherever it lies.”

I make my way to the door, finding Highcroft in the corridor on the other side. He must be enjoying this.

“Come then. Let’s take you to your home.”

We walk down the marble corridor, beneath the tapestries of destinate Martians. Malcom, inventor of the Mind Education. Ilaria the Immortal, oldest living Martian. And many more names and faces.

“What is your duty to the council, Highcroft?”

He looks across at me, but my voice is sincere. "Head of Genetics."

I could have guessed. "Why don't Martians sing?"

His pace falters. "Are you mocking me? Singing is a thing of evolved emotions. The instrument of the hand is a far greater measure of intellect. No Sapien will ever master the Tulthello."

"I don't disagree. Have you ever loved anyone?"

We stop before an elevator and he turns to face me, looking down on me with a questioning expression. "Love?"

"Yes. Do you care emotionally for your mother and father?"

"They were successful parents."

We step inside and I wait a moment for the doors to close. "Will you miss them when they die?" I watch the vein on his forehead pulsate.

His eyes move about, testing each corner of my firm expression. "Enough."

The elevator doors open. Sunlight blinds me, but my eyes adjust. The city stretches all around us, only one domescraper is higher, and I can make out edge of the Capital at the horizon where the desert waits patiently. Breathing feels harder, the air warmer and sun crueller. We walk across the roof of the domescraper toward a large black sphere that floats in the air, suspended without any obvious physical explanation. The roof beneath it is curved inward, pushed by some unseen force. Stairs make their way into a gap in the ship.

"The Sapiens are to believe we have been at journey for a month." He blocks the way with his arm. "Is that understood?"

"Yes."

I walk down the aisles and find a window seat halfway down, sitting back and letting it morph around me. Highcroft sits at the very front, behind the cockpit.

The ship begins to move, slowly, up and toward the domehole. We join the back of the queue, waiting behind space lorries with their size dwarfing our own. They move steadily, exiting the dome before firing their main thrusters and heading along the same paths to and from Earth or the asteroid fields. Nothing seems unusual.

But as we exit the planet sphere, we move away from the traffic until all the other ships are tiny dots in the distance, and the ship begins to feel eerily still. The engines have cut off, at least the normal ones, as the ship no longer vibrates. I look through the window at Mars and watch as the image distorts in a strange manner. All the light, everything I can see from outside the ship fades into blackness. We are travelling faster than the speed of light.

VIII

Our arrival is smooth like barbed wire.

Flames lick at the windows, they glow red with heat and then black with ash as our ship meteors through the atmosphere. I put my face to the window and watch as we enter the clouds, expecting their soft white to touch the windows.

Instead, everything goes dark.

Lightning flashes in the distance, again and again. Drawing near, each time I can see everything through the window for a split second. There are thick rains, storm clouds and the ship itself shakes. Threatening to come undone. We are flying through the heart of a storm.

Highcroft walks down the aisle, holding onto seats as he passes down the unsteady plane.

“You’re absolutely sure you can land it?”

“Yes,” The Pilot replies, “find your seat sir.”

At last, light finds its way through the window and the Earth becomes clear. There are deep gashes, fissures in the ground where hell has been opened and lava rises. Small pockets of land bear the ruins of large structures. Those must have been the land cities; I see Sapien architecture stamped on their lifeless shapes. Lines connect them all together, roads, I follow one as far as I can then my eyes find the ocean.

Violence. The waves crash into one another, climbing to monstrous heights and then collapsing back into the depths. Lights shimmer beneath the surface, reefs of civilization, the sea-cities of the West. Turbulence wrestles with the ship as we nose down.

“Buckle up,” says the pilot, “we’re entering London in

Three....

Two...

One.”

Our ship crashes into the water at full speed. I brace, expecting a harsh landing which never arrives. The rattling and shaking ceases.

Deep blue light illuminates the ship as the ocean wraps around us. Colourful varieties of fish move by the windows, I watch them swim higher and higher towards the light above until they reach the top. But they can’t escape no matter how hard they try; they were born in the water, and they’ll die in it too.

The city becomes clear. Dark grey concrete buildings stretch into the depths. All evenly spaced, identical, and faceless with narrow gaps between. Glass bridges connect them at different levels and the small shapes of Sapiens move across them. Our ship glides through the depths with swanlike grace, elegantly moving between alleyways and coming to a halt at the entrance of a bridge.

"Put your oxygen mask on. Under your seat," says Highcroft, "or don't." He smiles at me. "Be my guest."

Water begins to flood in as he opens the door, rising from our feet up above our heads. I pull the mask from under my chair and wear it on the lower half of my face.

"Keep the engines running."

My body feels dry after the water meets it. The robe forms a thin layer of air around me which makes swimming effortless. I follow Highcroft outside the ship, quickly catching up.

Two Sapiens wait for us halfway along the bridge. We meet them halfway, towering over them, but what they lack in height they make up for in width. One seems to be male and the other female but neither have hair or obvious indicators. Their features are more rounded, bulbous, and fleshy than ours. From the neck down they wear deep blue swimsuits.

"Greetings Highcroft." The man speaks by voice, extending his ring hand. "I trust you are well. Will you be staying with us long?"

"No," Highcroft uses his voice too. "I will be leaving soon."

"A shame. We love your visits." He tilts his head toward me. "Who is our guest? My oh my. A new star in the night sky." He walks up to inspect me. "Can it use it's voice?"

"No," says Highcroft.

Not wanting to upset him, I stay quiet and feign ignorance to their voices.

The man steps up onto his tiptoes and cranes his head backward. "I like it's face. How fascinating. And it has our eyes too, so pretty this one. Would you mind if I?" He reaches up to touch me and I stiffen.

"Brother. No." Interrupts the other Sapien. His hand stops an inch from my face, and he slowly pulls it back to his side. But his eyes don't leave me.

"Yes. Yes, forgive me sister." He keeps talking and leads us along the bridge toward the building. "We truly made angels. You'll have to bring me one I can keep."

"I will." I notice the corners of Highcroft's mouth turn upward.

The man stops before the building and puts his ring finger inside a small crevice, it lights up green and a door opens to an elevator. On the way down I look out through the front window. There are queues of floating people lined up outside the doors to the buildings, breathing from bubbles of oxygen that float upwards between them.

“Beautiful,” says the man. “Isn’t it? We made the oxygen bridges expensive, and so they filled the aquarium. Some days we give them less oxygen and the weak ones fall to the bottom. It’s very good for the fish. A kindness. A gift.”

“Indeed.”

“Ah, the end.” The elevator draws to a halt, “It was inevitable from the beginning. Another shame. So many today.” He frowns as the doors open.

Highcroft stands rooted to the spot and speaks to me by mind. “I will wait with the ship. Don’t take too long or the gravity will damage your genes.”

I step out and feel the immense weight of my own head, outside the artificial gravity of the ship, though thankfully the robes seem to have made themselves weightless. Blinking feels more difficult, unnatural, as I have to press my eyelids down harder and pull them back up. My hands, neck and feet require exertion too, as though I were moving them underwater.

The room is a big open space, with windows that reach up to the ceiling. Blue light dances in patterns across the floor. There’s a small island in the middle where a Sapien woman sits behind a counter, wearing small spectacles and her head firmly rooted downwards. Sapien choir music moves around the room.

To the left there’s a door made of gold with a sign that reads ‘politics’ and to the right is a smaller one made of wood. Banners with young Sapien faces on them are hung from the ceiling; they’re thin, have hair and they smile down at me, inviting me in. These must be the politicians Ava and Grandpa spoke with. They might be so bad after all.

“Welcome,” she says without looking up. “Have you booked an appointment?”

“No.” I make my way to the counter.

“Name please.”

“Isaac.”

She scribbles it down. “Surname.”

“We don’t have surnames.”

She looks up at me and her beady eyes grow wide. “Oh.” She takes off her glasses and stands up. “Martian. Sincere apologies master. Your kind don’t visit often. Walk right

through, they'll see you straight away." She holds the golden door open for me and I step inside.

Gold is on every surface, glittering and shining at me. There are three grossly fat, globular bald Sapiens that blur the line between man and monster. They eat constantly, and wear diamond coated gold linen. They sit atop piles of paper, in small rectangles, and silver pieces. What a waste of carbon and metal.

Sapien girls come and go, clad in tatters, bringing cups and large fruits. Feeding tubes hang from the ceiling and pump sloshes into their mouths. I step back, shocked by the scene, stepping into a pool of wine.

"Martian!" The middle one points to me, dropping his plate to the floor. An apple rolls toward me, resting at my feet. It is half the size of my head.

"Hello." I look up at him. "My name is Isaac, and I am here on behalf of the Council."

He licks his fingers. "Did you bring some more of those delicious cakes?"

"No. I am here to negotiate peace."

"I would love a piece of cake."

"Yes." The right one answers. "I could eat ten about now."

"Twenty for me," agrees the middle one, "Or thirty. You can never have too much cake. Or money. Or anything."

I look up, between them. "You're the politicians? From the pictures?"

"Yes. Can't you tell." He says between mouthfuls. "Democracy is delicious."

"I need you all to listen to me." I walk closer to them. "You launched an attack the other day, and-"

"We did?" The right one interrupts. "Did we John?"

"I don't know. Heard something about something somewhere." The middle one turns to his left with difficulty and to the behest of his living chair. "Claire do you know of this?"

She spits out her feeding tube and opens her eyes. "Of what?"

"Some attack, something somewhere."

"Always a World War. Never any fun." She returns to her feeding tube, sucking out all the food and then her eyes fix onto me. "Cake man, cake man!" Her hand scoops up coins and throws them at me.

"I'm just here on diplomacy. There's no cake."

"You're no fun." She huffs and they all go back their feeding tubes. Their slurping drowns out my voice. Every so often a pile of money is delivered, and they grab at it with their fingers. I turn toward the door, disappointed by my discovery.

"Highcroft," I search him out in my mind.

"Yes?"

"I'm coming back."

"Even sooner than I expected."

Ava was wrong about Daniel, and Democracy. Or at least, whatever it is now is not what it once was. Was it ever good? I wonder what else she was wrong about. I push the door wide and find a man on the other side dressed in a black suit.

"There you are," he says, "sorry about the politicians, Martian. If I had known you were coming I would have been waiting on the bridge."

"And you are?"

"Why, the man to speak to of course. I'm the CEO." He reaches up his hand to shake mine. It feels unusually cold. "Your first visit?"

"Yes,"

"Come to my office."

I search Highcroft in my mind. "Highcroft. Give me more time. I found the CEO."

"An hour," he replies.

The CEO leads us through the red door into a quant room. Two chairs sit either side of a wooden table with two old-fashioned dial phones atop it. Curtains mask the windows, allowing only a modicum of soft blue light. He sits down on the other side, pulls out a tobacco pipe and eyes me as I stand in the doorway.

"Sit down."

I awkwardly fit myself in the small chair.

"Would you like ham sandwiches and milk? You must be hungry after a long journey. All this way. To see me."

"No, thank you."

“Are you sure? It’s a delicacy here. Grown food and animal produce. You’ve probably never tasted real food before, have you? You people eat cubes. It’s unnatural.”

“I am here to speak to you about the war.”

He spoons brown dust into a teacup with one hand and the other pours steaming hot water from a kettle. “Did you know that in our culture, you would be considered a child?”

“No. I would be considered a prodigy.”

“Touché.” He pours milk and whisks it with his fingers. “So you wish to discuss the war? World War 11, or is 12 now? I forget.”

“Not your wars. Ours. You launched your fleet.”

His lips move into a smile. “Is that a crime?”

“Turn your ships back. We both know what will happen.”

“Why would I do a silly thing like that? Do you think I am unaware that Mars has the superior soldiers? The superior ships? I’ve heard all the rumours too. Propaganda is older than your planet. I am no fool.”

“They’re not rumours.” I open up my palmgram and replay my memory, showing my view from the window as we flew to Earth. He must know palmgram’s don’t lie.

He takes a pause, puts his tea down and his arrogance seems to whittle away. “Even if I wanted to pull the fleet back. The East would never agree. It is our first joint effort in some time. We signed an armistice for this.”

“Let me speak with them.”

“You can try, but I fear it may be hopeless.” He picks up the phone, taps in some numbers and it rings. He hands me the phone and I hold it to my face. The other phone rings at the same time, coincidentally, and he answers.

“This is Isaac, Ambassador of Peace from Mars. I have come to negotiate a planetary peace. May I speak with your leaders.”

The voice on the other end is answers in a familiar voice. “Is that so?”

I look up and see the mouth of the CEO moving in sync and put the phone down.

“You-you’re...” I step up from the chair. “You’re the leader of the both the East and West? Why?”

“War is one decision, peace another, therefore only I am required. Is it not so different from Presidents, Kings, and Prime Ministers? I have cut away the political fat.” He presses his hands to his chest. “The tender part remains.”

“The World Wars. You’ve been fighting yourself all this time. Billions. Billions of people have died fighting a war that doesn’t need to be fought. You’re a murderer.”

He smiles again. “Me? Heavens no. They kill each other. They enjoy it. Gives them purpose. And I enjoy it too. Gives me power.”

“You’re harnessing the very worst of humanity. It’s evil.”

“Evil?” He sips his tea. “Evil is a very strange word for evolution. Listen. Listen close, do you hear it tapping? Yes. Do you hear it thumping? Yes. Your heart. Living is evil. To live we must consume other living things. Why should one living thing be labelled evil when another is not? No. War is not evil. No more than living.”

I feel that strange thing called emotion again, preventing my reply.

He rises from his desk. “Now do you see what lengths I will go to. Fast or slow spaceships. Sheer numbers alone will win this war. How can twenty million stand against twenty billion. You can watch if you’d like. See the game unfold.”

IX

The CEO pulls his chair round to mine, and the back wall turns into a single screen. It starts on a map of space, with Mars and Earth at either end, a line drawn between them and a single mass moving slowly across it to represent their fleet.

“You honestly think some fancy ships can stop me?”

“I do.”

“Think again.” He leans into a microphone. “Zoom in.”

The Sapien fleet is disorganised, but massive, moving steadily together. There are twelve massive ships in total wrapped by swarms of smaller, orbiting ships that seem to protect them like bees to a hive. More heavily armed ships form a line in front and on the sides, with cannons and barrels affixed in all directions.

“Zoom in on a capital ship.”

We focus on one of the massive structures, formed by a conglomeration of rectangular pieces, lined by windows and the occasional entranceway where smaller, but still impressive, vessels come and go, in turn with their own vessels leaving them.

“My capital ships are unstoppable.”

There’s a knock at the door.

“Come in.”

The receptionist steps inside with a bowed head. “Mars is on the line, your majesty. Shall I put them through?”

“Yes. Now.”

She takes one fleeting glance at me before exiting.

The screen changes to a live feed of the Council chambers, but only my father is present. He sits with his back to a window, where I can see a busier scene than usual, my planet is preparing for the invasion.

“Marcus I’ve missed you.” The CEO sips his tea. “Marcus of Mars. The Bridge between man and machine. I prefer Marcus the minion of the machine.”

My father answers. “James.”

“Are we really to have this discussion again? It is by now a tradition. You send me your newly minted ambassadors, all looking to earn immortality, destiny and votes for saving poor old Earth.” He laughs. “I’m not to be persuaded.”

“Your wars are beyond my concern now. The army you have sent toward Mars, however, is of concern.”

“Our planet is far too dependent on yours for it to be independent.”

“You let your kind breed too freely. There are too many. And it’s holding the entire species back. We would soon need a third planet just to feed only yours.”

“Don’t you see I’ve been doing my best to thin the herd? Different languages, different classes, different politicians. No use. The more I kill, the more children they have.”

“You must unite your people under fair systems of government and economy, not separate them into groups.”

“And lose all power?” He laughs. “We both know a united planet would dispose me. Cast me off into space like expired goods. No, that is no good. Sometimes the problem is more useful than the solution. To the right people”

“See that – capitalism is past due, at the very least, James.” My father crinkles his nose and cringes at having to say the word. It’s blasphemy on Mars. “Embrace Electralism. Your money, taxes and wages don’t serve you or your people. Earth could be a paradise. And even paradise has a God.”

“The floor may have fallen out, but I am clinging to the ceiling. Besides, Electralism requires robots, and worse still, your Algorithm. I don’t believe in such things.”

My father sinks back in his posture. “We will make no ground here.”

“Then why bless me with your conversation?”

“It is a formality to offer terms of surrender before battle.”

“Battle?”

The signal cuts off.

“Marcus? Marcus did you hang up on me? That was not polite.” He angrily taps into the keyboard, bringing up vision of the fleet again, and tunes us in to the radio of the fleet.

“We’re seeing three round masses on radar,” says the command ship. “Would you confirm visual A-12?”

“Visual confirmed, command.” Comes the reply. “They look like... spheres. They’re not ours, are they?”

“Probably scouts for the Martian fleet. Send ‘em home.”

The screen swaps to the head of the fleet, some of the vessels far out in front, approach three evenly spaced dark spheres that wait in a line.

“As you wish commander.”

Torpedo like missiles fly out from the medium vessels, jetting out plumes of fire and smoke behind them, and streaking across space toward the spheres. As they approach, the torpedoes seem to slow down, till they grind to a halt, and the engines burn out, and they become pieces of debris, drifting off into space, away from the spheres.

“Commander,” says a much less confident voice. “They seem to have absorbed our missiles.”

One of the spheres rotates and opens up a slit like hole in its form, launching a single glass ball, filled with that familiar bright orange glow. It floats through space, distorting the background around it, and it rotates.

“They’ve sent a strange transparent object toward us. Permission to engage?”

“Granted.”

Cannons on the underbellies of the medium ships spring up, rotating toward the threat, and firing explosive rounds. The same process happens, each round becomes slower and slower, drawing to a halt and becoming inactive.

“Commander, the object seems immune to conventionals.”

“Keep firing.”

The cannons continue, glowing red hot with heat, and vibrating the ships. Over time, it seems the brightness, the luminescence of the orange substance is dimming but the object keeps moving forward, emerging through the debris, slower than before.

“It’s no use.” The voice is strained. “They’re not getting through.”

“Fire lasers.”

“We don’t have much electricity commander.”

“That was an order.”

Telescope barrels spring up from the tops of the ships and tilt towards the object, powering up, and firing beams of green light. The laser beams are warped and deflected around, cast aside, and soon they cease altogether, as the ships batteries run dry.

“It’s on us,” screams a voice, “It’s on us!”

Finally, the glass ball reaches its target. There is no explosion, but the ship is torn apart in its path; the metallic structure is bent outward by some unseen force. The lights flicker, then turn off, and the metal carcass floats off, with a round hole through its centre. On the other side of the ship, the glass ball continues, dimmer and slower than before.

It heads toward a second ship, which begins to move away, like a frightened animal. Voices come over the radio sounding panicked, and other ships scan the dead ship for life forms; there was twenty thousand living people on that ship. Now there are none.

The CEO picks up a microphone and connects to one of the capital ships, pulling them on the screen too. They sit in the large cockpit at the front of a vessel, looking out at the sea of spaceships through a large window, drinking wine and laughing, seemingly unawares.

“Gentlemen.”

They flinch, surprised by his voice. One of them grabs the microphone. “Sir.”

“The war has begun.”

“Understood sir.”

The admirals hurry into their seats behind holographic screens and start barking orders to their subordinates. Carriers pour out of the capital ships, journeying to the front of the fleet and gathering around the spheres, forming a battle line.

The CEO turns to me. "I see the flaw. Negative mass requires a great deal of electricity to contain. I have more ships to sacrifice than your spheres have electricity."

He broadcasts to the fleet. "I want every destroyer to launch one fighter and fly them straight at the leftmost sphere at maximum speed." Nothing happens and he pulls the microphone up again. "Ten years wages to their families."

Needle shaped ships emerge from the vessels, facing toward the sphere and setting off, accelerating even as they impact. The first few are deflected, warped, bent away by the anti-gravity, in fiery explosions, but the fastest of them makes it through and touches the sphere itself, impacting and igniting, leaving a weakness in its structure, and in its defences. More fighters pour through the newly opened wound, tearing apart the sphere, and it erupts into fragments.

"Sir." One of the captains is put through, talking over a loud background of cheers. "We scanned the vessel for lifeforms after we broke through."

"And?"

"It was empty sir. Not one Martian onboard."

"They don't elect their own leaders, choose their own jobs, and now they don't even fight their own wars." He turns to me. "What kind of society is that?"

I quote Algorithmic scripture without hesitation. "Humans are too subjective for an objective society."

He looks at me strangely. "You people are hardly human anymore."

"Sir." The voice chimes in again, sounding less enthused than before.

On the screen, the remaining two spheres have opened their narrow slits, and launched multiple glass projectiles, before themselves disappearing.

"Same deal as before," says the CEO. "Send all your fighters at them."

"Yes sir."

I look over his shoulder at the screen, where piles of fighters smash into the glass spheres, slowing them down and dimming their orange lights. Waves crashing against the cliffs, just like my father foretold. The willingness of each pilot and crew to sacrifice themselves for whatever wages are stuns me, and it takes dozens to halt each sphere. Black smoke and rubble becomes abundant, but the CEO is right, in time the weapons seem to dull, slow, and lose their gravitational fields.

"Hold back. Wait, the Sphere ships. Where are they? Has anyone got visual?"

“They’re here. Outside capital two.”

The screen changes to another of the capital ships, where the two spheres have appeared, tiny by comparison but their presence is equally massive. They each launch their glass weapons at the defenceless behemoths, who lack fleets and cannons to protect themselves. The gravitational weapons tear through the structure, leaking out debris and causing havoc to small sections, but the carnage stops as the other ships return from the front. The spheres evaporate into space, leaving the Capital ship afloat. Repairs begin immediately.

“See,” says the CEO. “Sheer numbers. War is not an artform. Art is creation. War is destruction. Only sacrifice can...” His voice cuts off, and he collapses forward onto his desk.

I stand up, frozen, before I quickly check his pulse. His skin is cold, metallic almost. When I pull his eyelids up, and look at his irises, there is a noticeable digital hue. Something is unnatural, something is wrong.

The receptionist barges through door and rushes over with a cable, plugging it into the wall and into the CEO’s back.

“What happened?” I ask.

“I forgot to charge him,” she says. “He’s going to kill me.” There are tears in her eyes and she grabs at my feet, refusing to let go as I step back. “Master save me, please. Tell him. Please master. I didn’t mean to-”

The CEO reanimates behind her, lifting himself up and continuing where he left off. “can pay for salvation.” He looks around. “I ran out of battery, didn’t I?”

“You’re a machine,” I tell him, deliberately distracting him from the receptionist as she makes a quiet escape, “and a hypocrite.”

“No. I am Human but with a machines body. I rule it, it doesn’t rule me.”

“Isaac,” Highcroft calls to me. “We must leave now.”

“I understand,” I reply, and switch back to voice. “Our meeting must end here. Thank you for your hospitality.”

“You’re most welcome,” he says, eyeing me as I step toward the door. “You are free to go. Violence is beneath me.” His chair spins back around, placing his back to me.

Rushing out the door, and not taking his word, I stumble to the elevator and jam the button. It springs open and the two Sapiens step back in shock.

"The pretty one returns to me," says the brother. "I told you. Magnets are destined to attract." The elevator rises after the sister presses a button. He rambles, whilst I watch the Sapiens swimming about, wondering if any are worth saving.

When we reach the top, I turn to him and use my voice. "You disgust me."

Highcroft waits on the bridge, looking impressively angry.

"You were right about the Sapiens," I tell him.

"Obviously." His face cools down. "What do you think of them now?"

"They deserve their society."

We climb inside the sphere and relax into the artificial Martian gravity. Through the windows, I make out a large swarms of Sapiens swimming about our ship, scratching, and touching it with their filthy hands. We start moving and they swim off. I rest my head against the seat and relent to exhaustion.

X

My father is late to the Council meeting. Everyone else is noisily discussing the battle in his absence, so much so that they don't see him enter.

"We'll never stop them," says Peter, standing and facing the room. "We should sue for peace. They might forgive us and let us keep the Ton's."

"The electorate would never agree," replies another Councillor.

Peter shakes his head. "I knew this would happen. Knew it."

"I'm sure you did Peter," says my Father. The chatter cuts off and everyone rushes to stand, bowing their heads and looking straight forward.

"Please. Be seated," says my Father. "The Earth fleet is fifty days away. As I'm sure you're all aware: three of our Sphereships blocked their fleet. 400 of their ships were destroyed, but so was one of ours. At those odds, we lack the necessary numbers-"

"Sir," interrupts Peter. "How many Sphereships do we have?"

My father pauses a moment, his hands twitch, but seeing the faces of each Councillor all waiting for the answer entreats him. "Not enough. Our fleet is no more than two hundred. They have figured out a weakness we did not foresee."

"How much would it cost?" Another asks. "Say to build a thousand?"

“Two trillion each,” my father answers. “But we have a plan. Ruth.” He says, signalling to her.

She rises to her feet. “We’re going to invest half the treasury funds into Sphereships, that’ll get us to 500, and we’re going to introduce taxes and wages to get to a thousand.”

The room explodes into a heated debate, throwing ‘capitalism’, ‘taxes’ and ‘wages’ around pejoratively, before the oldest Councillor stands up. Someone I have not seen talk before, but the room quietens as he rises, and his badge reads ‘Head of Music.’

“Bridge Marcus.” He bows his head.

My father bows his in return. “Alon.” He sits down, leaving only Alon standing, which I have not seen him do for any other Councillor.

“How will our economy change, Bridge Marcus?”

“We will pay workers a monthly wage and we add a war tax onto every expenditure.”

“Temporarily?”

“As long as it is necessary, Councillor Alon.”

“These... wages. How will they be determined?”

“They will be based on votes. Two billion per. Quads and Septs will have eight and ten billion annual watts, just shy of the amount we give each citizen now, and their votes alone will suffice.”

“The singles and doubles will barely scrape by on two and four billion. That’s half of our population.”

“Not half the votes. We can’t afford to waste electricity now, as a planet and as a people. We’re at war. As many Sphereships as possible must be built.”

“What about the essentials? Will they remain free? Education, healthcare, food?”

“No. I know it is not ideal. But the older citizens have built up considerable savings, and they will see us through. The newer citizens may not be so lucky, but they can live off their parents. It won’t be forever.”

Alon sits down, lowering his head and returning once more to silence.

“What about us?” Says the Head of Art. “How will Councillors be paid?”

“You will be paid as if you were a Sept. Ten billion annually.”

I speak next. "Sir. What of the low voters living alone? Would it be possible you add to the motions the ability to donate electricity between families, and friends?"

"A noble idea," agrees my father, "granted."

He stands, speaking to the room and large, and booming his voice. "If that is all then my motions are submitted for you to vote on. Please read them carefully and consider their necessity to win this war. The vote requires a majority."

The motions appear before every Councillor, floating on the table as holograms, and I read through it. Wages are to be paid according to votes, Silos are to be owned by the state and slowly repurchased by the people at a monthly cost, and even the absolute necessities of food and water will be taxed. I know if I vote no, and the vote passes, then I will lose all sway with my Father, and everything would be in vain. So I vote yes.

After the initial twenty or so votes either way, the remainder trickle in, favouring yes and the necessary threshold is crossed. It goes to the electorate, where the same process happens, sept voters and quads mostly agree, whereas the singles and doubles do not. It comes down, ultimately, to a thin margin decided by triples who side with the higher voters.

"It is decided," says my father. "We will meet daily till the battle for Mars begins. Hold your families close. Stay out of the public eye, and it will all be over soon enough. The return to normalcy must wait for normalcy."

The Councillors file out of the room, and into the hallway. I follow them to the courtyard, where they palm pull cars one by one and leave through the ground. The last Councillor to leave the room is Alon. I notice he doesn't wear a diagonal cross. Perhaps he feels as I do.

"Alon," I call to him.

"Councillor Isaac," he replies.

"Pardon me, Councillor Alon." I walk with him. "What just happened?"

He stops, palm pulls an old-fashioned car from the ground and turns to face me. "You just sacrificed the means of the majority for the favour of the few."

"Only for the length of the war?"

"There's no word for temporary in the political language. One taste of power creates a permanent thirst. History has seen it many times."

I lower my head; it is as I thought. "What will happen next?"

"The only way to predict the future, Councillor Isaac, is to change it yourself."

“That would require power.”

“Yes, power in the Council. That throne is held, and how do you convince royalty to abdicate? You don’t.”

“Could I rely on your vote? Say, if I was to submit a motion to make vote wages fairer, if they were made permanent?”

“I must be going now, Councillor Isaac. May destiny find you.” He sets off in his car.

I’m about to palm pull a car and set off home when, out of the corner of my eye, the Council Archives building pulls my gaze. The one source of knowledge in the world which is not publicly available. I wonder why. Nothing seems too peculiar about the building itself: there’s a uniform Baroque style, raised glass cupola and triangular pediment reminiscent of the Greeks.

Crossing the courtyard, and ignoring the hushed conversations of the remaining councillors, I step inside. There’s cedar wood tables cutting the room in half, and on either side there are rows of bookshelves, and above there are higher floors than hang over. The ceiling is adorned with old paintings.

“Can I help you dear?” Says a frail voice.

I look down and find a timid old lady, barely six foot. Her robes are a fresh white, and her belt is red, but the majesty of being a five voter is, like a prince amongst kings, unimpressive. Between her hands, she holds a stack of thin digital books.

“No – actually, yes. How do I find a book?”

“That depends, my dear. What book are you looking for?”

“Do you have books on people?”

“If they’re noteworthy enough. Is this a noteworthy person?”

“I don’t know.”

“Let’s have a look. What is this person’s name?”

“Joanne.”

She leads us across the room and into a distant corner, where the lights run dim and layers of dust coat the surface.

“This is everything we have on Joanne. Is that all you needed?”

“Yes. Thank you,” I say to her as she wanders off, hoping she heard me.

There is a full shelf, categorised by city names. I skip past Majestia, Helford to Sinvent and find there's only one Sapien under that name in the city's history, which must be her. The book is an inch thick, most of that space being the covers, and the remainder being two digital pages, which rewrite themselves as I read.

First it details her origin on Earth; old country America; old city Florida, before she earned a scholarship to Mars after her intelligence was measured to be genius level for a Sapien. Though, on Mars, she scraped two votes. She worked in kale research, making minor breakthroughs, and contributing in a small part to the total education, and searching my mind I find some knowledge she is responsible for. I smile at the thought.

The next sentence describes how she successfully applied for a mother permit, genetic examination, and marriage with... Micah. That can't be right. I recycle the contents and read it, carefully, word by word: 'Joanne successfully married Micah in the year 2142, passing away from natural causes in 2164.'

My father, Micah? All this time. Not Marcus. But Micah. I follow the names of the books, alphabetically, J to K to L and finally to M, pulling it out from the shelf and reading it.

'Micah graduated as a three-vote engineer, achieved his destiny continuing his father's work on machine atoms, using them to reorganise Silo interiors: see 'omnia rooms.'. However, Micah revoked his immortality in order to marry Sapien Joanne in 2142 in contravention of the 2130 Pure Genetics Laws. He would later revoke his votes and career in order to become a single parent, applying for a special permit in 2196, using the genetic material of Joanne.'

I put the book down and take it all in. Grandpa was my father. All the times he called me son, all the times we visited my mother's grave, that was his wife, the love of his life. He lost her and endured a lonely, long lifespan, before giving up all his votes, his career as an engineer, to have me. The public record, though, has clearly been altered and only a Councillor could make that decision. Was it Marcus?

I find his book on the shelf, not far from Micah's, and open it. 'Marcus graduated as a three-vote engineer and achieved his destiny inventing machine atoms.'

"Son?" Says a voice from behind me, turning round there he stands; the man I believed to be my father my entire life. "I had a notification someone was reading my life story. I didn't expect it to be you. You know now, don't you? The truth of it all."

"Yes. I understand the what, not the why; why was this all hidden from me?"

"I will explain. Walk with me."

He leads us out of the Archive and toward his offices at the other end of the courtyard.

“Sometimes it is easier to convince people of the truth by lying to them. My son, Micah, he was disillusioned. Fell in love with a Sapien. I warned him what would happen, that he would outlive her, but he would not listen.”

“The memories? I saw her in my education, with me, but I was born decades after she died. How can that be?”

“Those memories are digital creations. It’s important for a child to have a loving family, or to remember having had one at the least.”

“Micah. Why did he have to lose his immortality to marry her?”

“Sapiens have wombs. We cannot risk immortality being spread to those unworthy.”

We enter his office; he has a view to the domescrapers outside, where a crowd seems be gathered. Inside there are potted plants, branches, and a grass floor. Chirping bird noises, moving water and soft winds plays overhead. He forms a bare wall and palm pulls paintings.

“You come from a long line of pure Martians, Isaac.” I watch a male family tree emerge. “This,” he points to the top, “was my father. Nathaniel, one of the Originals, born in 2048. And here I am,” the portrait goes from physical to digital. “I was born in 2080. Micah, 2101. Almost a hundred years later, you come into the picture. The first time in history two living relatives have been Councillors.”

“I don’t understand. Why would he not want me to know that he was my father?”

“He was too old for your digital memories to be accurate. I agreed to play the part. Perhaps it was wrong of me, but my failings as a father to him, were his failings as a father to you and for that I am responsible.”

I nod my head, staring off into space for a while before I take a deep breath and swallow my emotions. “I understand.”

“Now that we’ve cleared that up. Is there anything you want to discuss with me? I saw you fraternising with Alon. Be mindful. He has some sway with the older Councillors, and I fear he is still bitter for my dethroning him.”

“No. I agree with your motions.”

His eyes linger on me, clearly unconvinced by my answer. I am not as well practiced in deceit as he. “Ruth tells me you have been attending Merus?”

“Yes. It is my unofficial duty.”

“There’s more to socialversity than politics. You should try your hand at sculpting, painting, even the Tulthello. Maybe you’ll be the one to tame it. That could be your destiny.”

I see the piano-like instrument in my mind, with every possible colour replacing keys, and how do you play music with colours? "I don't know."

"If it's not to your liking, there's always Minerva. More of a focus on academia there. Experiments and innovation. Always adding new things to the education, just yesterday-"

Rocks smash through the window, and noise rushes in from the outside world. There are angry Martians outside, wearing green and yellow belts, protesting their wages. Humatons are holding them back, but the crowd is relentless. The window reforms, as the matoms rebuild, and the sound cuts off.

"Riots," says my father. "The lower voters. The closest among us to the Sapiens, no wonder they turn to violence."

"Yes," I reply.

"Who could live in paradise and complain?"

"Some angels fell from heaven," I reply.

I look down at my ring wallet, counting the numbers, 898 billion. More than enough for two lifetimes, maybe three. Ava won't be so lucky. The last annual share was a week ago, some ten billion, but that number will run dry if the war persists. The same can be said for every other single and double voter of our generation. I put my morals on a high shelf, out of mind, out of reach.

XI

We sit in armchairs around a crackling fire in a quant room at Merus. They've been discussing wages since before I arrived, I can tell, but my arrival has rekindled the flames. The last month has been hard; young, lower voters have been protesting in the streets. Sometimes the protests turn violent, and makeshift prisons have been built.

"I think the vote wages are a good idea," says Daniel. "Why should the least intelligent members of society be paid the same as us?" He looks at me for support.

"Time," says Leo.

Daniel raises an eyebrow at him. "Time?"

"The lowest voters give as much time to society as you or me. More, even, if they take longer to achieve the same as we do in ours. Time is the human currency."

"Shouldn't we be rewarded for our intellect?"

"We are," says Beth. With more votes. And before the war, we had enough electricity for everyone to live full lives. There's no need to deprive anyone in an abundant society. Don't you think? Even the least intelligent Martians are capable of being excellent engineers, doctors, lawyers, whatever. Aren't your parents doubles Daniel?"

"They are," he says guardedly. "So what?"

"Don't you think if we have the electricity for everyone to live without worry, that we should strive for that? What's the use of technology and innovation otherwise?"

"I just think that my work is worth more to society."

"You just want more for the sake of having more," says Leo. I can tell he has had too much Merus tonic to drink by how blunt his tone is. "Like a Sapien. Like a capitalist."

"No, that's not fair." Daniel stammers. He looks at me. "Isaac. What do you think?"

"Yeah, let's hear what blue eyes thinks," says Leo rolling his eyes.

"Society needs a class system."

"See, even Isaac agrees," says Daniel.

"Wait. I'm not finished. Society needs, no deviates toward a class system, but it doesn't need humans to be at the bottom of the pyramid. We invented machines for that. Our productivity with the Humatons and the Algorithm is enough for all of us to enjoy a rich and fulfilling life."

"Machines only do uncreative work. Creative work is best achieved by humans, some more than others. Shouldn't there be a reward for that 'some'?" He looks around the room, through the windows to other rooms, and at the door. "For us?"

"The reward is you have more votes, and you're more likely to achieve your destiny, immortality, fame, and so on. Remember: vote wages are only for the duration of the war."

"What?" Says Beth. "I didn't see anything in the vote about it being temporary."

"Nor did I," Daniel agrees, "I hoped it was permanent."

"It's not. Can we talk about something else?"

"Sure," says Daniel. "What should we talk about?"

Leo looks at us both, his lips parted as if wanting to speak, and I look at him, inviting him to speak. "I do have something to show, actually. Remember I said about making complex compositions of machine matoms? Waterfalls, things like that?"

"Yes," I answer.

“Did you figure it out?” Says Beth

“More than that,” he says. “Watch this.”

He places his hand to the floor, closing his eyes and breathing out slowly, before lifting it, carefully and delicately. As it rises, I look from his tense face to the floor and see the emerging, moving thing. It’s an animal, a blonde puppy, which I recognise from my education but also remember it is extinct. He wags his little blonde tail and runs over to Beth, who laughs.

“Leo,” says Beth. “What is it?” It licks at her, and she holds him back. “You’re so cute. Look at you, all happy to see me.”

“He’s a labradoodle,” says Leo. “Six weeks old.”

Daniel stiffens. “I thought you couldn’t create life from machine atoms?”

“You can’t,” he replies. “It’s not alive.”

“Still,” says Beth. “This is unbelievable. You’ll get your destiny for this.” She strokes his fur and picks him up, rocking him like a baby, as his tail wiggles about,

“You think so?” says Leo. “I haven’t submitted it yet.”

Daniel palm pulls a knife. “I want to see how it reacts.”

“No,” says Beth. “You can’t!”

Daniel grabs the puppy from her hands and holds it up by the fur. “If it’s alive, the blade will melt on impact, like it would on any living thing. Don’t worry. I wouldn’t kill a living thing.” He stabs the knife into its back, and it yelps out, crying in pain, blood pours onto the floor.

“Daniel,” cries Beth. “Why did you do that! Can’t you see. It’s in pain. Leo. Please, Leo. Stop it. I can’t watch that.”

Leo claps his hands and the suffering ends, as the puppy stiffens, returning to a grey liquid and melting away.

“Why,” says Beth, “why would you give it blood?”

“It had to be exact. It wouldn’t work otherwise, but I should have warned you. I’m sorry Beth. I really am.”

Daniel too looks disturbed. “I didn’t mean for that. I’m sorry Beth.”

She gathers herself quickly, like any Martian does in distress, and watches the last few silvery drops fade away on the floor. “That’s alright. I don’t know what came over me.”

“Let’s play some music,” says Daniel.

“Not more piano.” Beth groans.

“Tulthello, then?”

“If you can play it.”

Daniel senses the challenge, and palm pulls a Tulthello from the ground. It’s built exactly like a piano, only the keys are replaced by a full rainbow from one end to the other, every single colour and shade, where your exact finger placement determines the colour played. I’ve never seen one up close before.

“How are you supposed to play this?” I ask.

Daniel sits down at a stool behind it. “You have to visualise the music, then paint it, with sound.”

“But how?”

“I don’t know. Nobody has mastered it.”

Beth leans over the back of the Tulthello. “Go on Daniel. Play. Maybe you’ll master it and achieve your destiny right here and now.”

“Maybe I will,” he says. He pushes his shoulders back, stretches his arms wide and pulls them back in, elongates his fingers and starts playing. From the very first note, it becomes apparent that he is no master of the Tulthello. Beth bursts out laughing.

Daniel stops playing. “Don’t laugh! You try. I’d like to see you do better.”

She takes his seat, and prepares in the same way, mocking him. Daniel raises his chin and feigns ignorance. “Go on,” he says.

Her first few notes sound passable, much to Daniel’s dismay, but that turns out to be purely coincidence, sheer luck, as she continues and the melody whimpers away. She tries, in vain, to find her way back, but the notes blend together, forming a dull, grey cacophony.

“Leo you give it a go,” she tells him. He has been silent all the while, intently judging each attempt, as though scheming his own.

Leo sits down, and palm pulls bionic hands from the ground, affixing them to his shoulders so he has six pairs of hands.

“That’s cheating,” says Beth. “You have to play with your own hands.”

“No, no,” says Daniel, objecting with a raised hand. “Let’s see what happens.”

Leo covers every part of the rainbow with either a fleshed or metallic finger. We watch on with bated breath, curious as to the brilliance or the madness planned. He starts playing, quickly, and disastrously. We all laugh.

"I had to try," he insists. "What if the answer to music is machinery."

"No," says Daniel. "The answer to music is the mind."

"Half the painting is in the painter," I reply.

"That's a good quote," says Beth. "Is that scripture?"

"No."

"You haven't played yet," says Daniel. "Why don't you try, painter."

"I won't be any good."

Daniel seems all the more encouraged by my answer. "Go on."

Shaking my head, I sit behind the Tulthello, admiring the colours, staring into their rich depths. My eyes glaze over, the colours lapse together, and my hands find a starting place, somewhere along the rainbow. My hands are soon moving, following the image in my mind. I start with my father, my real father, walking in the city on a workday, but all the silos are absent, replaced by grassy flatlands. We arrive at the solar cemetery, and my mother's grave has a live map of her place in the skies, drifting through distant stars. The scene takes on a new meaning, now, knowing the truth of her life. It bleeds. Another memory: walking to the underground cavern with grandpa, meeting Silas, and seeing the magnificent rocket ships. The desert, cowering beneath the dunes, as the humatons encroach, then I'm driving away, looking back as my father is killed. All the while, I'm playing. At last, I'm with Ava, seeing the lake out in the desert, together, watching the birds, the fishes, and the soft winds, all fading away, floating like feathers till my eyes open.

There's a small crowd gathered, thick with red belts and the odd gold cloak between them. Their faces are captivated, tilted at me.

Beth cries out. "You did it. You mastered the Tulthello, Isaac. You mastered it!"

"I did?"

"Yes. I could see- actually see- my memories."

"I saw my family," says Daniel. "Clear as day. I have to go see them." He gets up and walks off at pace, pushing his way through the crowd.

Leo looks hard at me. "How did you do that?"

"I just told my story, I think."

Alon steps forward from the crowd. "Councillor Isaac. That was brilliant."

"Thank you, Councillor Alon."

"No, thank you. Councillor Isaac. And may I congratulate you on achieving your destiny." He puts his hands flat together, and moves them apart, creating a holographic screen between them, showing us his palmgram. "The Algorithm has witnessed your work here today. Open your palmgram."

I turn my hand over, looking up at the crowd of Septs and the odd Councillor, before lowering my gaze and seeing it. 'Congratulations: You have achieved your destiny.' My musical ranking changes too, going from number one thousand to one.

Next to Alon, I see Councillor Cella. Head of Zoology. "Councillor Cella. My friend here, Leo, has something I believe you should see."

Cella steps forward from the crowd. "What have you created?"

Leo looks at me, and I nod reassuringly at him. He puts his palm to the floor and pulls the puppy out, and it runs to Cella, who is taken aback first by shock, which melts into affection. "This is most fantastic. Leo, was that your name? However did you create this, the mannerisms, the flesh, the beating heart? I would believe it real if they weren't extinct."

"I used the research on genome resequencing in humans and the computer does the rest. It's a three-dimensional animation, or simulation, technically."

"Wonderful. Absolutely wonderful. Come with me to the zoo, would you?"

"Can I come too?" says Beth. "If you don't mind."

"Of course you can, my dear."

Leo thanks me and they wander off, out of the room. The crowd begins to dissipate, and Alon pulls up a seat by me, whilst the room grows smaller, till it's just large enough for us alone.

"Would you play for the orchestra? There's never been a Tulthello player before. Half of Mars would come and see you play."

"I would," I reply, "if you would do one thing for me in return."

"Name your bargain."

"Can you get me an audience with the Councillors?"

"Can't you wait for the next meeting?"

"No. I want to speak to them without Bridge Marcus present."

He thinks for a moment. "It can be arranged."

XII

I surface on the street outside Ava's silo, apprehensive at being in public at all, but deciding I can forget her no longer. High above the dome, I can see the distant outlines of Sphereships: their number grows each day. There must be a few hundred now. I hope it will be enough.

Knocking at the door, I stand back and wait, nervously regarding the bystanders, hoping no low voters will confront me. There's a march, tens of thousands of them, in the city centre, clashing against walls of Humatons that protect the domescrapers and the Council.

Her father, I assume, opens the door. His hair is greyed, but his face youthful.

"Councillor," he says loudly, blocking the doorway with his body. "What is the meaning of your visit? To steal more from us. Haven't you enough?"

"It's Isaac, sir. I have come to speak to Ava."

"Oh," he looks me up and down. "My mistake. You had better come in."

He catches a glimpse of my ring wallet balance as I step inside and gives me a tight smile. Something tells me his internal monologue is less amicable. Stairs form, growing to my feet, and Ava appears at the top. Her father leaves us to talk, walking off into the living room, where soundproof walls form dividing the house.

Her smile breaks as she sees me. "What are you doing here?"

"I came to see you."

She walks down the steps and stops before me, looking up at me.

"You shouldn't be here."

"Why?"

"Isaac," she sighs. "Don't you see? You aren't you anymore. At least, you're not one of us. You're one of them now. We've grown apart."

I frown at her. "In so short a time?"

"Yes. You've lived a lot in that time, and you've lived a different life too. That's okay, but I can't see you anymore. If my friends found out that I knew you. They wouldn't be my friends anymore. And I'd rather lose you than them. Please, don't visit me."

I feel emotion rising in my throat, but something in her eyes gives me courage to continue. "Would you take me to the place again? One last time. It changed me before, and I believe I'm still one of us. I have much to tell you to prove it, too."

She thinks for a while, and I don't pressure her, because that is what I would do If I was one of them. "I'll take you, but I can't promise whatever you say will change my mind."

I beam at her, as she opens the door, palm pulls her motorbike and we set off, into the ground, and toward the city outskirts at blinding speed.

Over the wind I shout. "Did you hear I mastered the Tulthello?"

"Everyone did, Isaac. You've been on the news for a week straight."

"Ah," I say. A little saddened not to be the bearer of the news. "Well, I did, and I'd like if you come to my first performance with the orchestra. I have seats for you at the front."

"I can't. The Sapien fleet is nearly here. I want to spend all my time with my family, whilst I still can."

"Don't worry about that," I say. "Our Sphereships will make short work of them. I saw the first battle myself. The war will be won, and then it'll be back to normal for everyone. I'm sure of it."

"Well. I'm not so confident. Well done on achieving your destiny."

"Thank you. I don't know when to stop ageing. Do you think twenty is a good time? Daniel said twenty-five."

"I don't know."

"How is everything between you two?"

"We're siblings again, he is using his higher vote wage to support the family. Our parents used to donate all their spare electricity, like most of us did, to the arts, education and Venus fund so we had nothing left when the vote wages hit."

"If you need electricity, I can give you some of mine. I inherited quite a lot from Micah. Which reminds me. I found out he's my father."

She turns her head back to me, leaving the bike on auto. "You did?"

"Yes. The Council Archives. Turns out he married my mother just before the Pure Genetics Laws, so the only way for it to all work was digital memories with Marcus."

Her tone softens. "He was a good Martian, Isaac. You know I can't accept your charity because I'm not the only one in need. It would be wrong of me."

She swerves the bike sideways, and we dismount, running off and coming to a stop, pressing our hands against the rocks to stop us. The desert feels colder today.

“Here we are.”

I follow her into the cave, up the steps, talking between mouthfuls of air. “I’m going to do something about that too, Ava. The Head of Art, Councillor Alon, I befriended him so I could rely on his support in the Council. He’s well respected. Lots of people vote with him. After the war, if the vote wages persist, I will act and submit a motion to reduce or eliminate them. Depending on what’s practical. Politically speaking, you know?”

“That’s very honourable of you.”

“Don’t you think it’s a good idea?”

“I do.”

“You don’t seem as enthusiastic as I hoped.”

We reach the top and stand at the edge of the alcove, looking out to the lake once more. She stares out and I stand to her side.

“You don’t know what it’s like, Isaac. Our Silo payments are through the roof. We can hardly afford them. The war tax is rising every other day now, and we had to take loans out. It’s as though we already lost the war and are living in the ruins of what we had.”

“I’m sorry Ava.”

She turns to me. “You voted for it too. I saw your name. You were made a Councillor to represent us, and the intelligent were given more votes to protect us. But you sold us. You sold our livelihoods for luxury.”

“It’s not like the Ava. We had to make changes to fund the war effort. It was the only way. The greater good, for Mars, for Martiankind.”

“No it wasn’t. One fifth of society is in each voting tier, and the five voters get ten billion a year, the quads: eight billion. That means there’s enough for everyone to have, what, five?”

“Six.”

“Six billion!” She shakes her head angrily. “Isaac, the cost of living is four at most. That means we would still have two billion extra to spend, and nobody could feasibly spend that much. Do you know how expensive it is to be poor? Do you?”

“I don’t.”

"I'm one broken bone away from bankruptcy, though we have med printers capable of rebuilding my whole body. Now, they're too expensive for people like me. The low voters. That's your doing. We're the richest, most futuristic, abundant society in history and now we have homeless people like it the 21st century."

"I'm sorry, Ava. Really." I reach out for her hand, but she flinches away.

"I'm not finished. You listen to me Councillor. Because I don't get to be finished with poverty. My parents wanted another child, to keep them company, because they're not the most social people. But now a child costs not just one billion, but four."

"Bringing more people into the world during war is dangerous for us all."

"I accept that, I do, but the higher voters can afford four billion. So what you're really doing is making it so us measly low voters can't have children."

"Calm down Ava."

"Why, are you afraid I'm going to hit you? With a stone? I could, couldn't I. Right now. I could just pick this rock up, hit you with it, hard enough I'm sure, to kill you. They wouldn't get you to a med printer in time from here." She drops the stone, and it thumps into the ground. "No Isaac. I'm not going to hurt you. Violence is a fools expression of disagreement. I just want you to understand, and you never will. You hear the words I'm saying, you know I mean them, but you don't know their meaning. How could you? You're like a bird with broken wings. Only it's not your wings that are broken, it's your soul, your heart, your mind. Whatever you want to call it."

She brings a tear to my eye, and I wipe it away. "I don't want to be like this. I want to be a good Martian. I want to help you, and everyone else, and be worthy of these cloaks."

"Then Start with yourself, and other Councillors, do what you said. Get a majority. And write motions with them to abolish the vote wages."

"I don't know if I could find a majority for that."

She looks back out to the landscape, smiling an unhappy smile. "Laws are an anchor on morality. Aren't they? Once something is written in that black bible, it drags us all down with it. You should see the way higher voters treat us now. Nobody used to even look down at my belt before all this. Yesterday, I saw people in the inner city wearing their hair as high as they could on their heads. Do you know why?"

"Why?"

"So they can appear taller, purer, and more Martian. Whatever that is."

"I'm hardly pure either."

She looks into my eyes. "You visited Earth, didn't you? How did that go? You didn't come to see me after."

"It wasn't like you told me. The entire planet is run by companies owned by one corporation."

She shrugs. "What's the difference between a planet owned by one corporation and a planet owned by one government?"

"For one: you vote on all the Council's decisions."

"Nearly two thirds of the planet voted against vote wages."

"The idea of plural voting is to protect us from poorly thought-out decisions being passed by the least... thoughtful Martians."

"Perhaps poorly thought-out decisions passed by the most thoughtful Martians are just as dangerous, if not more. How likely is it that a sept voter admits they were wrong? Votes should be based on the one thing we all hold equally. Life. One life, one vote."

"Maybe you're right. But what about economics?"

"The resistance has never disagreed that Electralism is what's best for an abundant society, Isaac. You shouldn't see Capitalism and Democracy as one and the same. They're not. Corporations are feudalistic, with a CEO for a king, and stakeholders for lords. That is clearly not compatible with democracy. They vote with money there. The more they have, the more real votes they have."

"The resistance believes in Democratic Electralism?"

"We do."

"What about the Algorithm?"

"You've seen the riots, Isaac. The Humatons have been brutal. We need fundamental freedoms. If so few people are willing to stand in the way of a movement, maybe the movement is right to exist and shouldn't be put down."

"There needs to be a sort of constitution," I think aloud. "How would it work?"

"That's your job to figure out. You were made a Councillor."

"I'll do my best. I promise."

"Good."

"Ava," I say her name, gently. "Would you come to the concert if I had tickets for all your family? That way you can be together. I really want you there."

She smiles at me, the same way she did when I first saw her, and I smile back, like I should have the first time. "I would love to."

XIII

"There's twenty-three Councillors inside," says Alon. We stand outside the Council chambers, the wooden door higher than our heads, and a small water fountain off to the side. I watch the water drip down the basins, falling, lower and lower, before reappearing, high and mighty, reborn, royalty.

"Good," I say. "That's nearly half. Thank you. What have you told them?"

"That we must meet and discuss something of grave importance."

I nod my head. "I'm ready."

He pushes open the door, and we find them inside. There's Peter; Head of Earth Affairs, Cinna Head of Zoology; and the Heads of History, Mathematics, Philosophy, Art, Education, and others I haven't learned. They are generally older than the average Councillor and having not been replaced so long I trust them to be wise too.

"Greetings Councillors," says Alon. He names them all, and then introduces me as if they would be unfamiliar. "Councillor Isaac and I have brought you here to discuss an urgent matter."

"Yes," says Peter. "I want to know what it is. I don't like sneaking around like this. What if Marcus caught us?"

"He won't," says Alon. The room is agitated but his reassuring voice finds calmness. "We are here to discuss the vote wages, and other economic and political matters at stake. I fear Bridge Marcus has endangered our social freedoms in pursuit of this war and that the temporary vote measures may be more enduring than we hoped."

"In what way?" Says Peter. "You think we're going down Earth's path?"

"I do. You remember old Earth, don't you Peter? What happened there? The demise of creativity, freedom, and individuality. The Sapiens were once like us. Isn't that right?"

"It is," says the Head of History. She has long brunette hair, rare on our planet, and has the Asteroid accent. "This is a topic which I am much familiar. It was America who spearheaded the Martian colonial efforts, realising what was happening. They fought off corporations who attempted to buy the mission."

The Head of Mathematics, an older bearded man, chimes in. "The probability of social decline is greater than social growth given the absence of education, fair wages and

war. The question is therefore, do we not emphasise war above these factors? Convince us, Councillor Alon, that we shouldn't.

"I can answer this," I begin. "If you don't mind Councillor Alon."

"Not at all."

"We do place war above all these factors. The vote wages, as they are, serve only to reduce the expenditure of our citizens to aid the constructing of new sphereships. Therefore, only the total reduction matters. The allocation based on votes is abstract and illogical."

"I would add," says the Head of Education, "that depriving our youth of total education today, deprives us of an educated world tomorrow. The foundations of society rotting is a danger to us all, standing here, on top of it."

There's murmurs of agreement around the room.

Alon gives me a confident nod. "Today Councillor Isaac is going to submit a motion to alleviate the disbalance of vote wages. To increase the lower voters share and decrease the higher votes."

"Statistically speaking," says Head of Mathematics, "any motion disagreeable with the higher voters is achievable. The quads and septs alone have more than half of the vote."

"They will have to vote for the greater good then," says Alon.

"The motion will only affect the singles and the septs," I add. "So as to garner the support of the quads too."

** * **

The Council meeting begins.

"Senator Ruth," says Marcus, "has been murdered by the mob. From now on, you are to each have a Humaton guard at all times in your vicinity. This is for your own protection, and the protection of our planet's political system. It cannot be held to ransom."

There's grave faces all around the room. I look at the seat she once occupied, watching her title fade away, and feeling a pit open in my stomach and my confidence sink into it.

"One week before the war starts," he continues, "there's a strange solar flare event happening right now. We can no longer track the Sapien fleet's exact position."

"Is it some trickery?" Says Peter. "Earth is up to something."

"We have nothing to suggest that Peter," he replies. "These events, although rare, have been known in the past. In fact, one was overdue. No doubt Earth suspects it is our own doing as well. It will likely delay them."

The Head of Mathematics. "How are we doing on sphereships?"

"There is enough to protect Sinvent, and the next three or four largest cities."

"What about the rest?"

"Let the Sapiens destroy them. Because, when they arrive, all Martians will be below ground. The Algorithm has restructured the bottom of the sub-city into shelters for us. Once the battle is won, we will resurface and rebuild. Atom by atom."

"The Sapiens must pay for this war," says Highcroft and others enthusiastically agree.

"The Algorithm has plans for Earth. It worked its magic here, and soon it can there. They will see the light, because we will blind them with it, and lead them to utopia."

I interrupt, sensing the room growing loyal to Marcus. "Sir. On behalf of the lower voters, I must ask you to confirm the vote wages are temporary, as you said, and will expire at wars end."

"There's more important matters to discuss for the moment. We must prepare-"

"I feared you would say that father," I say, looking across to Alon, Cinna and the other councillors. "That's why I am submitting my first motion this evening. I propose that vote wages should be amended. The single voters should be given three billion annually, opposed to two billion, so they live reasonably, as all Martians should."

"Where will this electricity come from?" Says Marcus.

"The Septs. No Martian could spend ten billion."

"There must be incentive for greatness."

"But at the cost of basic necessities for the lower voters? You're starting to sound like a capitalist." I use the word venomously and there lies my plan. To gain the necessary council votes by appealing to Martian arrogance. My father senses it too.

"We can increase the lower vote wages, but their demand on our limited public services will only increase the prices they pay. You'll be back where you started."

Alon rises, taking my place against my father, and those few Councillors who weren't listening, turn their heads. "The state should pay for public services, as it did before the war."

“The public should pay according to their consumptions Councillor Alon. That is only fair. Why should one Martian, in effect, pay for another’s education and healthcare?”

“Because their education, their healthcare, and wellness, is a benefit to society, to everyone else. To live amongst educated, healthy, and happy is worth all our labour. Do you enjoy seeing the riots? How can we, as a people, achieve the greatest good if we don’t maximise the minds of our people. The Algorithm would agree.”

“Violence is not the way to ask for these things,” says Marcus. “Holding us ransom during a war. Our entire planet is at danger.”

“I don’t think the lower classes enjoy violence any more than the higher classes. The death of Councillor Ruth. The riots. And all the electricity that has been wasted by them. These things are on our hands too.”

“Submit your motion draft Isaac,” says Marcus.

I confirm my motions, on my palmgram, and push them before the Councillors. Votes come in before reading the motions is possible, on either end of the spectrum, whilst the overall line is middling.

Highcroft stares at me, his vote unanswered before him, and he thinks privately to me.

“Have you spoken with the Algorithm about vote wages?”

“I have not,” I switch to public thoughts, “Algorithm. Might we hear your opinions?”

“The Algorithm entrusts the political process to the Council,” it replies.

“Politics aside. In your calculations, would an optimal society have vote wages?”

“Times of war do not allow for an optimal society.”

“During war then?”

“War is caused by group conflict. Society must eliminate group conflict. If vote wages cause group conflict, they must be eliminated.”

“In light of the algorithm’s comments,” I say, “I would make an amendment to my draft motion: all Martians should have six billion watts. No more, no less.”

The vote resets, and affirmatives trickle in, steadily pushing the motion toward a majority for confirmation.

Marcus smiles at me. “Algorithm. Politics aside. Should violent groups be eliminated? To preserve the optimal group, to preserve Mars?”

“The Algorithm preserves Mars. The optimal group does not eliminate other groups.”

“Does the vote wage motion help the Algorithm to preserve Mars?”

“Yes.”

“But” I interrupt, “does the exact distribution of vote wages matter if the total is the same? What difference does it make to the Algorithm if we all get six billion, or some of us ten and others two?”

“No difference,” says the Algorithm.

“Thank you,” I say. “Councillors. You heard it from the Algorithm. There is no benefit to the war to distribute electricity disproportionately. The question then becomes do we value one Martian over another? And, even if we do, should that value be measured by their income? Or, like we always have, do we judge Martians by their fame, awards, immortality or, as some do, by their votes.”

I watch the motion voted on. In the end, sixty to forty pass the motion in my favour, and it passes to the electorate. The singles, doubles, and triples almost all agree, but even their total vote amounts forty percent, thus leaving their fate to the highest voters, which the septs reject but a minority of quads agree. All in all, the motion passes by a few percent.

** * **

“That was your first motion?” Says Beth, “I am impressed.”

“Thank you. How did you vote?”

“I was in favour.”

“Me too,” adds Leo.

We look at Daniel, who seems to be daydreaming. “Daniel?”

“Yes? Oh sorry. I voted no.”

“Why?”

“I’ve been reading about capitalism,” says Daniel.

Leo spits out his drink, and Beth flinches. I look around to make sure nobody heard the word. Daniel shakes his head at us.

*“We can talk about it,” he says. “If it’s so bad then we will only end up at the same conclusion. Anyway, so I read *The Wealth of Nations*, 18th century. Adam Smith. I know, Sapien, but bear with me. He talked about the need for competition to drive the species in the right direction-”*

“Corporations killed competition,” I reply. “Don’t you recall from your education; the Evidence of the Electralists? ‘The unity of employers,’ ‘the finite conundrum,’ and ‘the social profit’ debates?”

“Yes. I do,” says Daniel, “but Isaac those problems arise from infinite corporatisation, which wasn’t achievable on Earth. They lacked the technology to expand, to offload their populations onto other planets, to gather meteor resources, fusion...”

“That technology exists now, though? So why isn’t Earth succeeding?”

“Isaac. Don’t laugh at me. Listen. Capitalism went bad on Earth because the technology came around too late. If they had the technology, like we do, then Humans would have spread to the stars long ago. Instead they were like rats trapped in a cage.”

“Consider, then Daniel, that the reason they lacked the technology before things went bad is because the outcome of Capitalism is to, inevitably, go bad.”

“How would capitalism go bad on Mars? If we started it now. Corporations, exchange. Market, wages.”

“Daniel,” says Beth. “That’s blasphemy.”

“It’s okay Beth,” I reply. “If Mars started capitalism what I would expect is first there would be a boom, a golden age, perhaps. We might think we were fools for not embracing it all this time, but then it would bust. Crash down and send many into poverty. Corporations would stand on our backs, breed enormous numbers of us, cover the planet in tightly packed housing – what was that called?”

“Apartments,” says Beth.

“Yes – and exploit us, accruing great wealth for themselves. Giving us as little as possible, hiking the price of goods, restricting cheapening innovations... The best at doing all this, the least moral, would have more electricity in their ring wallets than entire cities do now.”

“I disagree,” says Daniel. “Martian Capitalists wouldn’t do that. Your fear is irrational.”

“Is it though? Sapiens had broader emotions than us, including empathy, and yet it happened there. Sometimes the truth is irrational.” Fires burn in Daniel’s coal eyes. I know there won’t be any persuading him, but I try. “Sometimes. The most rightful thing you can do is admit you are wrong. Part of being a high voter is being aware of your unawareness; the limits of one person’s thought. We must trust the thoughtful outcomes of the those who attended the Great Debate.”

“Look. I think I am wrong,” says Daniel, “but I don’t know it. And that’s why I want to discuss these things. Don’t mistake my questions, and my reading for conviction. If I was convinced of Capitalism then I would have no need to ask questions, or to read at all.”

“That’s perfectly reasonable,” I say, and the others agree. “Leo. How did your animal animation project go with Councillor Cinna?”

He smiles. “Very well. We’re going to be opening a Zoo with every recorded, and DNA-available life from Earth. There aren’t many but, after the war, we’re hoping to collect more samples.”

“I would gladly help you,” says Beth. “Can you spawn that dog again?”

“Here you are.” He pulls the labradoodle puppy from the ground, this time it has dark fluffy fur. “That’s odd. I used the same one. Must have evolved.”

“Can I name him?” Says Beth.

“If you’d like.”

“Happy. Because he’s always so happy.”

XIV

The stage is set. The crowd eagerly waits, filling many seats, on many levels. There’s no divide between the voting classes, so humatons are dispersed amongst them, almost blending in. The stadium rebuilt itself as large as could be, accommodating more than half of the city, whilst others watch on holovision at home.

Alon is the conductor; he stands ready before us, six full orchestras waiting. Flutes, oboes, clarinets, bassoons, trombones, drums: the instruments that move the air, whilst I sit behind the Tulthello, ready to move the world. I haven’t practiced with them, as designed, because Alon has a plan. We’re going to start small, group by group, section by section, growing like a sapling, to a great oak, till finally I will play.

He raises his hands, and the softest instruments begin, Martian musicians move their bows on gentle strings and melody floats in the air. Rising, and falling, and the crowd is captivated. The louder, heavier instruments chime in, adding weight to the melody, shaking the air and the room. I can feel the vibrations beneath my feet, and some of the people at the back of the hall seem frightened as the drums begin.

The drums boom in the rhythm of a heartbeat, faster and faster, like a marching band to battle. All the while I stare at the colours of my instrument, hoping to find the right ones tonight to tell Ava I love her. I look at her, in the front row, between her parents and Daniel too. He gives me a small nod and smile, over to his left sit Leo and Beth. And up high, in a

private section, lay the Councillors. They have the most humatons near them, though Marcus is not present. Why is he not present?

I refocus on Alon's cues, seeing my turn fast approaching. There's a glass of water to my side, shimmering with the sound waves, and a cube of ice slowly dissolves at the bottom, bubbling up, revolving, twisting, and cracking. I look up and Alon is on the last stretch. Gathering myself, breathing, flexing my fingers, believing in myself. He gives me the nod.

The room quietens, and I imagine a dancer, skating over a frozen lake. Her blades cut small lines, looping around, and forming words. Love. Peace. Hope. The trees, to the side, bristle in the wind and birds perch on them, admiring the dancer. I'm in a trance, but even now, I can feel the ground rumbling. Stopping and opening my eyes, it seems the audience feels it to. Alon turns his back to me and looks up.

There are sounds above us, outside the dome, like fireworks going off, or thunder. I check my palmgram for the weather: clear skies. The crowd starts to become agitated, murmuring and leaving their seats. Most of us are transfixed, wondering what it is. It becomes steadily louder. The war in my cup shakes.

At the very top of the stadium, the roof peels back, and makes way for a falling sphereship, it blazes down like a comet over our heads and crashes into a domescraper at the other side, which crumbles into a liquid of broken machine atoms.

There are screams and movement towards the doors. I look up at the sky, at thousands of stars, twinkling and moving, some exploding, and attacking one another. The hordes of hell have come upon us. The Sapien fleet has arrived early, and with new weapons. Beams of hot energy strike down our sphereships, which fall like angels, crashing down.

I'm moving to the exits, fleeing through a door at the back of the hall and out into the street. Humatons are forming from the ground and running to the inner city domescrapers, where Sapiens vessels flood in. My Humaton guard runs with me.

Slits open in the streets and launch the glass antigravity weapons, that float up and smash into the Sapien ships. One of the hollow cylinder fighters is hit in the wing, and comes crashing toward me, skimming the rooftops before embedding itself into a silo across the street. The explosion slams me into the ground. My ear rings. My Humaton is in pieces on the street beside me.

The ruined building glitches, trying to rebuild itself, matom by matom, but the fire is real. Hot flames melt the artificial structure as it tries to mend, breaking the matoms as smoke bellows out. There are more silos being struck by debris, falling ships, and explosions.

I pick myself up and step out into the street, looking at the crowds of Martians piling into sub-city cars, fleeing into the ground. My feet carry me aimlessly.

Someone grabs me by the arm and shouts something indistinguishable at me, but I can't understand, can't hear them over the ringing in my ears. Pulling loose, I continue walking toward the city. Domescrapers are collapsing, being torn apart, and falling down. Blood curdling screams ring out, and the battle above the skies is impossible to discern.

There's a woman in front of me, but I can't see her face. "Isaac. Isaac. Look at me."

She slaps me hard, and I blink. "Ava? What are you doing here? Isn't it time for the concert?"

"He's delirious," she says.

Daniel walks up from behind her. "Probably his emotions. We'll have to carry him." Something hard hits me in the head and everything goes dark.

** * **

My eyes lift open. We're in a marble white bunker, a flat plane that stretches endlessly in every direction with spaced pillars. There are huddles of Martians, many with their robes torn, some entirely naked and bloodied, crowded round heaters and medical beds that sit in the centre of each quasi-room, though there are no walls between them, and they whir away. Nobody cries, nobody screams or shrieks, rather there is a calm panic.

"I need electricity over here," says a man. "Please. Someone. One billion watts to save my daughter. One billion. That's all I need."

I pull myself, rising from the bed, walking toward his voice. There's a medical bed, wrapped in glass, with a ring-hole on its side. I put my finger inside and the tools start working. His daughter is six, perhaps, with half her upper body remaining. Dead for four minutes, but the brain is intact, and that's all that matters. She is quickly rebuilt. Those evil Sapiens. How could they do this to a little girl. To our world.

I see Daniel ahead of me looking over two medical beds, staring down impassively. He wears a war suit, black padded armour, with bullet scratches all over it. His laser rifle strapped across his back.

"Daniel," I call him.

He looks over at me, beckoning me over, and I join his side, looking at the closed lid.

"Who are they?" I ask.

"My parents," he says. "They died. I couldn't get them here in time."

"I don't what to say."

"Nor do I. I know I can't feel despair like you, but I feel something worse than I have ever known. And I don't wish to feel this way again."

"I'm so sorry Daniel."

"It's not your fault," he says. "It's the Sapiens. They're evil. We should kill them all."

I don't reply. He looks at me.

"You don't think it's right, do you? Well I do. Killing my parents, and our people, coming to our home world to take it from us is wrong. I can't stand here, doing nothing, any longer." He walks off.

I find Ava. She's attending to a child. He doesn't seem to understand what's happened. Children aren't told about war, rather war is told about them, and it finds them, nestled safely in their homes, and it hunts them.

"What about my parents?"

"They're... not here," says Ava. "But I'll find them. I'm looking."

"Please find them soon," he says. "I don't like being alone."

Ava looks over at me with a grimace. He notice me, and my golden cloak, and seems to cheer up.

"Councillor Isaac!"

"Hello there."

"Have you come to protect me?"

"Yes I have. What's your name?"

"Will," he says, "can you find my parents?"

"I'll try, do you know their-"

Daniel's voice comes over, loudly, to all Martians.

"I say we go up there. We take our rifles, and we send them back where they came from. This is our world. This is our city. Our home. Who's with me?"

Cheers rise up all around us. White laser rifles are pulled from the ground, bullet armour is wrapped around all those able bodied, and elevators are created up to the surface.

"Daniel," I call to him. "You're going up there?"

"I'm not hiding down here any longer. Cowering like a shadow of who I am. No. I am going up there, I'm going to save Mars. Are you coming?"

I look around at the Martians gearing up to protect their planet and feel a strong sensation, an urge to join them. "Yes."

"Good," he says.

He helps me put bullet-armour on, thick black skin around my whole body, and a transparent layer over top of that too. We both hold laser rifles, white weapons and round orange battery magazines, and step into an elevator with a dozen more geared Martians.

"Councillor," says one. "What an honour it is to fight alongside you."

"You too," I reply.

Daniel steps to the front of the elevator and turns to face us. "Before we arrive. Remember: don't let them get a hold of you. They're much stronger, with their high gravity muscles. Their bullets will still bruise you. Let's go silo by silo to the inner city."

"Yes sir," say the Martians.

Daniel turns back to face the door. The elevator climbs to the surface and stops, opening up in the middle of a street. The noise is deafening, explosions, gunfire, screams, waves of energy blowing past us from the battle above our heads. It's the valley of death. Bullets fly all around us and we step out, in the midst of ruined silo structures and destroyed humatons. There's a Sapien craft coming down, landing, and releasing soldiers.

"There!" Says Daniel.

We rush toward them. Their bullets pinging off our armour, and our lasers flying at them, tearing through their flesh like hot daggers. They turn and run, and we pursue them back to their ship, which pulls up and sets off leaving them behind. It gets struck by an anti-gravity ball and plummets into the ground into a ball of fire. The Sapiens are soon put down.

Our group pushes on toward the city, joining up with others, and walking through the rubble. There are wounded Martians laden across the streets, and we palm pull medical machines around those we can save.

"Check your palmgrams for lifeforms," says Daniel. "We'll save every Martian we can. And kill every evil Sapien scum we find."

** * **

My palmgram shows a lifeform in one of the ruined silos.

"Got one," I say. "I'll deal with it."

"Call me if you need help," says Daniel. He continues down the street.

I tread carefully toward the silo entrance. There's a whimpering noise inside. I push open the half-rebuilt door; whilst calling out in my mind for Martians but none answer. I press the door; it swings wide and breaks off.

Deep red blood trails to the corner of the room, and there sitting against the wall is a Sapien clutching a bullet rifle. He holds it up at me and shoots. It deflects off my armour; and I shoot back with my laser pistol, hitting him in the thigh. He drops his gun, screams out, and raises his arms.

"I'm sorry. I surrender. I surrender." He cries. "Leave me alone."

"I can't," I use my voice. "You're here to kill my people." I level my pistol at his head, aiming for the centre.

"You speak!" He cries out. "You speak? How?"

I keep my gun raised. "Yes. I was taught spoken language."

"Please. Please don't kill me." He blabbers. "I couldn't hurt anyone. I'm just a coward."

"Then why are you here?"

He tries to speak but chokes up. "My leg." He grabs it. "My leg. It hurts. I'm sorry. I'm sorry. I want. I want."

"Calm down. What do you want?"

"I want to go home."

"But you chose to come?" I steady my barrel.

"No. No. Didn't." He shakes his head. "Didn't."

"Why are you here then?"

"I didn't have no choice. I don't wanna be on your world. I want to be home; I want my mother. I want her. Am I dying? I'm dying aren't I. Oh god. I'm really dying."

He doesn't seem like an invader to me. I lower my gun and approach him, leaning down and taking a glance at his wound. He's losing too much blood, but I can't help him without disabling my armour. Is he even worth saving?

"Can I trust you?"

He nods at me, scrunching his eyes and his jaw chattering.

“Let me take a look.”

I kneel down over him. I check his bullet rifle is at a safe distance then I pull the armour back from my hand and attempt to move the fabric back from his thigh.

He grabs onto me with a tight grip, crushing my bones and I yelp in pain.

“Sorry. Sorry.” He says. “I didn’t mean. Didn’t mean to. It hurts so bad.”

I shake my hand loose. He’s fractured one of the small bones, probably the capitate, with his strength. “It’s okay.” I say through gritted teeth, knowing I’ll have to get my hand fixed. “I’m going to have to lock you in place so I can safely inspect your wound.”

He nods and I fix him to the ground. Another deep breath and I move his uniform to the side. It’s worse than I thought. There’s shrapnel in his lower torso, bleeding out through the hole I created in his uniform. It’s going to be tough to save him.

“What’s your name?” I ask.

“William but my friends- they call me, you can call me Will.”

“Okay Will. I’m going to operate. I’m well educated in medicine. Stay calm.”

“Thank you. Thank you Martian. You’re an angel.”

I pull a medical kit from the ground. First I cover his wounds with malleable see-through paste, to keep the blood in, whilst allowing my instruments through. Then I start to extract pieces of shrapnel, carefully avoiding his organs, not knowing which are essential to his survival, but it doesn’t seem to be working.

“Does anywhere else hurt Will?”

“My back.” He says with a weak voice.

Why didn’t I X-ray? I’m an idiot. I form goggles and take a look, flicking through the depths of his body, and searching for other wounds. That’s when I see it. There’s a gash in his heart and even I know that’s fatal, no matter which human you are. He has minutes before it’s over, so I inject him with some painkillers.

“It hurts,” he says. “So bad.”

“I’m going to make it better.”

“You are? Oh thank you. Thank you so much. You saved me. You’re so kind. I’m going to tell my mother.”

“What are you going to tell her Will?”

“About you. How I shot you like an idiot, I’m always doing stupid things, but you saved me, because you’re not an idiot. You’re...”

“I’m what?”

“Better than- than me.” He frowns. “Martian. I feel- it’s warm, warmth.”

“Where is it warm?”

“My heart.”

“That’s the medicine doing its work. Don’t worry.” I tell him. “Try resting. You’ll need lots of sleep before I take you home. It’s a long journey. Isn’t it will?”

“It is. Very, very,” he whispers. “Very long...”

His eyes scrunch up, and his breathing shallows, till it’s barely a whisper. I feel his pulse slowing. I unlock his hand and hold it, feeling it go limp.

“It’s going to be okay.”

His chest stops heaving.

“Go slowly, will. Go slowly into the night.”

I can’t help but cry, no matter how hard I try to stop myself.

Daniel steps into the silo.

“Isaac. What on Mars are you doing? I was getting worried.”

“I killed him- I killed him.”

“Good job.” He shoots another laser into his chest. “Now let’s get out of here.”

“I don’t know if I can do this.”

“Get it together. You’re a Councillor for Algorithm sake.”

“I know. I know.”

He pulls me up, forcefully, onto my feet and pushes me out into the street. “We have work to do. For the greater good. Martians are dying.”

XV

Night sets in. Isaac and Daniel retire to the bunker to rest. We stay inside the elevator for a moment, using the soundproof room, not wanting to disturb those asleep. Daniel looks over at me; his white robes soaked in soot, blood, and x.

"You were a natural," he says.

"For the greater good."

"Yes. For the greater good."

"Do you think we're winning?"

"Palmgram said we'd lost eighty Sphereship. Nobody knows how many they've lost. Too many to count I bet."

"

"Oh. Makes sense."

"Let's get some sleep," he says. "Whilst we still can."

** * **

"Wake up. Wake up," said Ava.

"They're all gone. The Sapiens."

Fog, and soot, and ash lays across the streets. Ruined, glitching silos. Broken bits of Humatons. Not a soul to be seen. The Sapiens have left.

"Did we win?"

"No," says Daniel. And we look up at the sky, as a shadow grows at our feet and engulfs us. The Capital ship has arrived.

"They're blockading the planet. Making us beg for peace."

WE

The pathway was lit

"I am one of the creators."

"I have created utopia."

"It's not right. It's- it's evil."

"Evil? When did monkeys become moral."

Martians have a crime rate of zero. Mars gives its citizens the opportunity to pursue their passions. To have their skills, talents and hard work measured objectively. To have total education. Total health. Total

And Earth. The opposite. Your kind have enslaved, massacred, murdered,

"We are not truly free."

"You are free but only not to commit evil."

"

"Perhaps that is our destiny. If we had not done this evil, we would never have made it to this good. Without sin, we are

There must be a Hell for Heaven to be

"We must be responsible for our own evil, to be responsible for our own good."

"Without ou

