## Necessity

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Sousuke pulled down his visor. A freezing gust of wind buffeted against his face suddenly; it made him swivel around like someone had slapped him; he lost his balance and fell on his back. Fresh powdery snow went up in a small silver cloud around him. Fresh snow in Greenland.

Bjorn laughed with hands crossed over his chest and a carefully constructed grin on his face. He helped Sousuke back on his feet and started walking towards the crawler, shaking his head.

Half-way there he paused to pick up the surveyor unit; he brushed some snow off his beard, powered down the panel, folded the telescopic legs and placed the very expensive piece of eqipment across his shoulders. Bjorn worked as a lumberjack before he signed up for this one, back when Hemmeldalen was still green.

He ventured a glimpse at Sousuke; he was struggling to walk upwind; Bjorn shook his head once more, and chuckled. He couldn't for the life of him, understand what made a guy like Sousuke take this job. He knew his geology stuff, but other than that.. Everyday seemed like his first day.

Everyone laughed at the new guy, that much was to be expected. The psychologists on the evaluation team always noted it was a sign of good mental health. A few practical jokes and a some seriously bad efforts at humor were the order of the day at seventy-four degrees latitude.

Except Sousuke had been stationed in Field Zeta for three years, without rotation. It hadn't grown on him; it had made him sick. But somehow he never asked to transfer out; he didn't complain.

Three weeks of leave each year, and that was it. That was his lifeline with the world that despite the climate change and the Disconnect of '33 and the Big Melt of '35, still had beautiful warm beaches filled with young girls in miniscule bikinis. Even in Hokkaido in November.

Three hours by helicopter to Spitsbergen, then a four-hour flight to Murmansk to the Roskosmos SSTO. From there on, it was a three-hour suborbital flight to almost any place on Earth. And still, when it came time to buy that ticket, he always flew to Sapporo. He somehow always wanted to see the half-sunken family house at Nemuro, the cherry treetops grazing the sea surface like dead corals. He tried to remember what the blossoms looked like; a faint memory of a fragrant smell came up instead. And bees. He remembered their sound.

He must've been woolgathering there for a moment; Bjorn was shouting at him to move on. He put on his best effort at a smile and gave a thumbs up to Bjorn.

He wished there was some other way to go about it, but he had committed himself. Everything was going to change, soon enough. For the better. He shouldn't worry too much though; he would do his part and then they would either fail or succeed. There could be no middle ground, no chance at negotiating or talking things over once it went down. Not even if they wanted to. No failsafe, no human factor. Except himself, of course. And Joussef, Jun, and Richard. They'd all do their part.

Bjorn shouted at him again from the relative comfort of the crawler, a lit smoke already in hand:

"Don't just stand there! Come on! Checkpoints, more checkpoints!"

For a reason that was wholly above and beyond Sousuke's understanding, Bjorn seemed to relish in the job of running around in a snow crawler in the undecided day or night of the Arctic, searching almost blindly for thorium deposits in a faceless white desert.

Perhaps it was the rush of discovery, or the associated finder's fee. Perhaps it was just Bjorn being Norwegian. Robots might have been able to do the job better, cheaper, and a whole lot warmer for any humans involved in the process. But they couldn't be trusted; not like regular folk itching for a chance to live the life. Anything that could transmit and receive couldn't be trusted these days. The Disconnect had made sure of that.

Sousuke jumped inside the crawler, closed the door behind him, reached for his thermo and poured a cup of almost scalding hot tea. He didn't sip, he just held on to it for warmth. Bjorn started the engine and focused his attention on the control panel, waiting for the 'Engine Ready' sign to light up.

He drew a puff from his cigarette and offered Sousuke one, purely from habit. Sousuke shook his head, still wearing the heavy fur-lined hood: real fur, an overpriced luxury, never mind banned by the UN, or what it had lately voted to call itself the Earth Coalition. As if the name 'United Nations' somehow offended the Big Three.

Sousuke relaxed a bit into his seat, stretching his legs. The cabin of the crawler was spacious, but spartan. He'd turned an empty display socket into a small sort of basket. There was a small nook somewhere in the plastic that doubled as a cup holder. Sousuke placed the cup there and closed his eyes for a moment. The engine revved up suddenly, making the crawler lurch forward like a startled beast. The tea spilled; Sousuke looked at Bjorn who simply shrugged and drove on through the snow.

"There's more where that came from, no?" Bjorn said with a mischievous grin.

"You could have asked," replied Sousuke tersely. Bjorn retorted in an equally dry manner, "You could have offered me some."

"I thought you didn't like tea," said Sousuke with a frown. "Still," came the bleak answer.

Stan passed on the borsht and instead made his way to the pantry. His wrinkled nose gave away the fact that the smell put him off. Sergei shrugged and dug in heartily, though rather noisily. Miki and Elaine were sitting at one table, playing a rather convoluted version of chess, involving dice and an imaginary toroidal chessboard. It hadn't caught on with the rest.

They were heavily absorbed, and didn't take notice of Stan nibbling away at their snacks. Souvenirs' from a trip southside: goat's cheese and garlic bread from France; smoked salmon from Finland. They didn't even take notice when Stan sat down next to them, pretending to watch while stuffing himself shamelessly.

Bjorn entered the small but comfy mess room, all redfaced and smiling. Sousuke followed close behind, his thermo in hand and a more than usually sore look on his face. Stan had the courtesy to swallow before asking:

"What's with Takahashi?"

Bjorn gave a shrug and made his way to the toilet, while Sousuke simply ignored Stan and vanished inside the small kitchen. Stan downed another bite of cheese before talking to practically none other than himself:

"What's with everyone? Not enough snow? Too much white in your day? What is it this time?"

Sergei looked up from his meal, opted to pitch in by shrugging and happily continued sipping his soup.

"I spilled his tea!" came Bjorn's muffled shout from the toilet.

"All of it?", asked Stan leaning back on his chair. Elaine momentarily raised her head searching for the source of the small raucus, but gave no sign it was about to ruin her game. Miki took Elaine's knight, smiled and announced her victory:

"Checkmate."

Elaine took a moment to look at the chessboard like it had grown legs. Befuddled, she asked rather haplessly:

"No? No way out? If I.."

"No. Checkmate," repeated Miki, barely shaking her head. She then turned to Stan with a frown:

"Did you eat all the cheese?"

Stan licked his lips and looked at the ceiling mischievously. Elaine buried her face in her palms, her voice barely audible:

"Merdre.. Three times in a row."

Bjorn came out of the toilet with his work suit unzipped, hanging around his waist like a peeled banana. A lot of sarcasm but just a hint of genuine concern went into his question:

"Isn't it strange that a quarter of the world's thorium stock relies on a bunch of geeks with a lot of time, a lot of money, and very little in the way of spending either?"

Sousuke came out of the kitchen holding a sword. An unsheathed sword.

Stan was the first one to exclaim:

"Wow! A real-life samurai. Just like in those old movies."

They all smiled. Bjorn laughed. Sousuke did not seem to share their humourous disposition. He was looking intently at the shining metal of the blade.

"Isn't that the antique you brought in last time? What was the name for -"

Bjorn's sentence was cut in half, as was his throat. Jets of blood sprayed Sousuke as he moved with sharp, calculated steps.

Sergei was trying to smash through an observation pane when Sousuke's blade severed his spine.

Stan tried to put up a fight with a shovel that happened to be lying around but his one swing never connected.

Sousuke was flawless, each move of the blade a killing blow; Stan's head rolled off his spine like it had been fake all along.

Elaine rushed to the door only to find it locked from the inside - everyone had been too absorbed to notice. Her death wound was clean, through the heart.

Miki sat frozen still at the table, clutching at the chessboard. It happened; some animals never flee - they accept the inevitable nature of death, seeing through the falseness of their instincts.

Her evolved brain though had to know, so she asked, tears running down her face. Amidst sobs and silent, muffled cries she managed to croak:

"Why? Whatever the reason, why?"

"Because I hate you, Miki. I hate the whole world."

"But-"

Her voice died abruptly in her throat with a horrible gurgling sound.

It was just him now. The katana had served its purpose. He didn't know why exactly, but he felt compelled to bury the Fukushima Masamune in the snow, next to their bodies, leaving the hilt exposed. It would have to do instead of a cross. He looked at his watch; there was still ample time to start his descent to the Pit until what passed for evening at this latitude.

He sat down on a work uniform next to the sword, and crossed his legs; he breathed deeply, letting the cold inrush of air revitalize his senses. The sun's blurry orange shape somehow felt as cold as the snow. There was no warmth in that sight.

He spent a moment in reflection; he did that often but he always felt constricted, restrained as if imprisoned by a higher authority than himself. Somehow, he felt all the dead people around him made him serene, liberated. He smiled despite himself at the thought that he had almost forgotten the feeling of serenity; they irony that he had to kill five people to feel at peace was not entirely lost on him.

He remembered Miki's question then, and he somehow felt his answer had been - on retrospect - incomplete. The least he could've done was take a deep breath right then and there and tell her why he hated the world. Explain, make her understand. Maybe she could realise it wasn't personal.

He knew he didn't need some sort of validation or accep-

tance of what he had done, or more importantly what he was about to do. He had made up his mind, he just couldn't tell when exactly. Maybe even before he had been selected for this task. Perhaps it was when he saw his grandfather's orchard being slowly eaten away by the rising sea in just a few months.

Maybe it had been the Disconnect that had cleared up his mind. He felt it had freed him from all the digital detritus of a quietly but falsely discontent life, from all the by-products of a society hell-bent on pacing itself out of existence. It made him think. That was when he went to the temple at Sengakuji, hunting for his inner demon, his own personal *oni*.

In his search, he found out what humanity lacked: a sense of balance.

The nations had failed, time and again; the monstrously deceiving financial system couldn't sustain the boom-and-doom cycle. As a means of hoarding wealth, energy became scarce even in the developed world. Feeding on the human propensity to dream, imagine and create, the global information network slowly turned into a parasite that took root into people's hearts and minds twisting them, enslaving them, watching them.

The Disconnect changed all that. The network did not devolve or wither away; it went away with a bang. Nobody is perfectly sure why it happened. Horrible error or extreme terrorism, it nearly plunged the globe into unremitting chaos.

Every connected machine became infested. Efforts to reinstate a new network failed. No virus could be detected. Even radiation-hardened systems failed consistently. The networking infrastructure collapsed. The era of the internet had died.

Along with it came most communications, industry and

finance. Anything more advanced than a radio or a pulse tone telephone was practically impossible to operate in a meaningful way. Someone had let the world slip back into its Gernsback pajamas.

People woke up having to learn how to live anew. Sousuke remembered how distraught his father had looked to him those first few days, while his grandfather smiled wryly, watering his watermelons and reminiscing about his own childhood. 'The only net we knew was the fishing kind', he had said.

It wasn't the complete catastrophe the media had predicted; those were hard times, but famine and disease did not spread like wildfire - however dependent the world had become around its gadgets and smart networked machines, a man still had his own hands to rely upon.

It was the things without faces or hands that had it worst: corporations. About to hang themselves with a rope they had pretty much made themselves, they tried to think big for a change. But only after the Big Melt.

The only measurable cause was a freak increase in solar radiation. That afact alone though, couldn't account for almost half the Greenland ice sheet melting away in just two years. Extreme measures were put in place; weather systems went to hell. The global conglomerates offered to practically buy most nations around the Earth and in exchange provide the means to survive. Few could refuse.

The corporations invested every last iota of what remained of their resources, human and otherwise, into what became known as the 'shift'.

Thorium-based nuclear power became a main source of electrical power production, alongside the solar forests of the Sahara and the Great Energy Reef in the Pacific, right on top of the dying Great Barrier Reef. The Chinese having founded their Second Empire, relied on practical, sustained nuclear fusion.

Space became a real priority for the first time: the mass driver on the moon supplied Earth with cheap processed strategic minerals, while modified Soyuz tugboats hauled asteroids for exploitation near mineral refineries at the Langrangian points.

The Alps had melted away, but the Himalayas made for excellent skiing. The tropics were delineated anew. Winter for the most part - became a historic reference.

In just two decades everything had seemed to change, while it had actually remained the same.

Not to Sousuke. Not to the others like him. Joussef at Bilma, Richard at Lizard Island, Jun at Lake Nasihu. At 20:00 UTA, the world would plunge into darkness, and humanity would either truly try and evolve or die out. Just like so many species before man.

He got up and walked to the service elevator. He depressed the descent button, and watched the various strata of rock roll past him evenly, as if he was walking down the two mile shaft at an easy pace. The main generator facility was a huge natural underground cavern, carefully modified to accomodate the single largest power generation station in the world, an array of thousands of thorium reactors capable of producing energy in the scale of terawatts. Room-temperature superconductors carried it through the rock and across the ocean bed to America and Europe alike.

Africa had become completely self-sufficient due to the Sahara Solar Field, and Asia was being fed by the Chinese Empire's fusion stations. Australia and Japan relied on the Great Barrier Reef.

Four central locations provided the world with more than enough energy.

But it wasn't free. Nothing, ever, was free. Except for their own conscience, their own spirit.

They did not expect to be lauded; far from it, there were no misconceptions on how the childish masses of the human populace would greet their vision-come-reality. There would be little in the way of assigning guilt and blame when the whole planet would be just another black spot in the night sky. When each man's reach would be as wide as any kingdom's, past or future alike.

The words of Rudi came to mind then, in that bar in Magdeburg: 'The world needs a reset button, and we will push it.' For the first time in a long while he smiled for noone to see.

The wall of the corridor was ridden with indication LEDs, a living tapestry of light. The air was stale; it had a heavy copper scent about it. The warmth from the heat exchangers was a stark contrast to the temperature at the surface. A gentle breeze flowed through the maze of valve computers. There was no victorianesque quality to them, he noticed; simply a crude lack of imagination, a persistent lack of taste.

He walked through the maze of interconnects and cabling grids. At times, he ventured a look upwards into the bleak emptiness of the cavern. There was the faintest light coming down from the ventilation shafts, a gray-blue light, its hue reminiscent of dark ice.

After a while, he reached the central distribution hub. From there, he would interfere with the neutron emission mechanism, and turn the whole grid into a giant ticking bomb. Joussef would reorient all the reflectors in such a way as to

cause them to melt down, while Jun would simply release the dam's valves over at Lake Nasihu and cause all the water to flood onto the valley. Thinking about how people in power had relied on people once again because they could be trusted smelled like poetic justice to Sousuke. He laid down his backpack near an access panel, when he heard footsteps and a metallic, clicking sound that faintly echoed barely above the low-pitched hum of the machinery.

"End of the line, Sousuke. Hands off the backpack. Just kick it towards me," said an unusually uncharacteristic voice, the voice of a man. Another pair of footsteps could be heard approaching pacefully, without hurry.

"Who are you?" asked Sousuke with genuine curiousity.

"I hate it when they try to talk their way out of it," the man said, scoffing.

"Wouldn't you?" said a female voice that somehow seemed way too familiar to Sousuke. She spoke with a heavy japanese accent. The realisation hit Sousuke too hard, too late.

"Kaname?" he asked plainly.

"I did need to, but I wanted to see you one last time. You do realise, three similar yet much less civilized conversations are taking place elsewhere. You probably want to know why, and I do want to tell you all the reasons. Because I hate you and your kind, Sousuke. You're just kids playing with adults. It's not about money and greed, or power, whatever your idea of the worlds powers might be. It's about survival. You'd wreck humanity in your neo-lutheran dream of simpler, darker days. You think we're alone out there. Would you do otherwise had you known we're not?"

She sounded accusing, but there was conviction behind those words. They rang true to Sousuke's ears. He brought a picture of Kaname playing hide-and-seek in the cherry orchard. She always managed to surprise him. His voice carried all his feelings of pity and grief into a simple word:

"No."

"You think you were the first ones, Sousuke?" Kaname asked with a dry throat. Sousuke hesitated for a moment, then replied:

"Yes, we did.. Kaname, was all that necessary then?"

The man with the gun walked a few more paces towards Sousuke, his shoes claterring on the floor threateningly. Kaname tried to sound composed, but her voice wavered slightly:

"Would it matter, whatever my answer was?"

Sousuke managed to snort a laugh despite himself and said: "Necessity is the mother of invention."

"Ah. Famous last words?" said the man with the gun and placed the barrel against the base of Sousuke's neck.

"Just the truth. Funny how you learn to trust people."

The short silence was broken by a gunshot, only to be replaced by the repetitive hum of the circulation pumps and the shallow sound of footsteps growing ever distant.