I'm sure this can be justified as your lovely American free speech and not hate speech or malicious communication, and yes, I'm sure Corcoran has a perfect right to say it and all that shit. Guess what? I have a perfect right not to like it, and a right to not be associated with the nutter who spews it.

-- Warren Ellis, author of Transmetropolitan, Iron Man Extremis, The Authority

The Powers of the Earth

Chapter 4

2064: Meggers Crater, Lunar Farside

The sun was low in the sky and Earth had dropped entirely below their horizon weeks ago when they’d crossed to farside.

Aristillus had never felt so far away. Blue felt a shiver of loneliness wash over him.

He looked at Duncan. The younger Dog had shimmied forward on his stomach until his helmet was over the edge of the precipice. As Blue watched Duncan extended one gloved paw forward and tossed a rock over the edge - and immediately the youngster's tail began wagging.

Blue raised a tan-on-gray eyebrow at the youngster's all-too-predictable antics, and then smiled. He was a bit curious despite himself. He stepped carefully to the crater's edge, keeping all four legs on solid ground, and craned his neck to look over.

It took a while for the rock to fall to the bottom in the low gravity. The impact was soundless in the vacuum, of course, but Blue's suit was running the latest rev of Rex's simulation software with the effects turned up high, so the sound in his helmet was borderline operatic: a loud initial percussive slap and then a follow-on cascade of cracks, crashes, and clatters. Blue knew that the sound atoms had been culled from 140 years of television effects and curried together via pseudo-
random-number generators and a melange of s-expressions and state machines into a bespoke symphony of sounds customized for this particular time-and-date-stamp. Oh, did Blue know. Rex had gone on about it in mind-numbing detail for several days.

Duncan barked excitedly at the sound of the crash. Blue shook his head. Kids.

Blue looked over his shoulder and saw the rest of the group cresting the rise. John, the only biped in the group, came into view first. Max and Rex in their canine suits took another moment to show over the boulders.

Blue walked carefully backward from the crater lip and then turned. "John, the terrain is a lot steeper than it looked on the imaging."

John looked at the slope. "Sunset is still eighty hours away, but it's been a long day. I'm not up for a route change at this point. I say we pitch the tent, have dinner, and hike on tomorrow. Who's in?"

The vote was unanimous and the discussion about what to rehydrate and cook was in full swing when the six-legged cargo mule ambled over the rise, its blue solar panels and gold foil casting bright reflections in the sunlight.

As soon as the mule stopped and knelt all five of the hikers fell into their long-practiced routine. John and the two younger Dogs unloaded the tent and started the pressurization cycle while Blue and Max helped the mule to stretch the solar shield over the campsite.

A half hour later the air inside the tent was full of the smells of dinner.

On his cushion Rex was bent almost double, using his teeth to work an itch on his flank where his cooling undergarment was rolled up. He finished, pulled the underwear back into place, and launched into a complaint. "This isn't the first time this has happened. John, why don't you make Gamma give us better data?"

Blue wrinkled a lip. Duncan - practical-joke-playing, rock-pushing, happy-go-lucky Duncan - was a goofball, but Rex - he had a different kind of immaturity that was harder to nail down. Was it something in the engineering of second generation? Both Cambridge and Palo Alto had done a lot of tweaks to the genome before the 2Gs were decanted. Or was it just that they were young?
John put his slate down. "Rex, you know as well as I do that I can't force Gamma to do anything."

Rex shrugged. "Well, whatever. Not force, then...but he should listen to you. He's only here because of you."

John opened his mouth to reply, and shut it again. Blue knew what he was thinking, and admired John's restraint.

Rex, though, saw the silence as an opening and kept arguing. "You should explain to Gamma in terms that he can -"

Blue saw the weariness in John's face as he replied, "Rex, I don't -"

Rex steamrolled over him, lecturing.

It had been a long day and John's willingness to banter and entertain criticism wasn't infinite. "Hey, Rex."

Rex continued on, uninterrupted.

"Rex," he said, more forcefully.

Blue was riveted - and he saw that he wasn't the only one paying attention: Duncan and Max were also ignoring their slates, watching. Rex sputtered to a stop and met John's eyes...and then looked down. "Rex, you should know by now - you DO know by now - that Gamma isn't like us mammals. Do you honestly think I cam make it do anything?"

Rex didn't answer.

"And as far as you lecturing me about what I should do? No. I've done enough. For you, for everyone. This hike is my vacation. You're only here because you asked if you could come along. If you want better data, talk to Gamma yourself."

Rex exhaled sullenly. "Gamma only talks to you."

"Then get the data you want some other way. Pick up a coding contract and buy a mini-sat flyby. Or don't. But either way, no more complaining, and no more telling me what I should do." Rex stared glumly at the floor of the tent.
"Agreed?"

The Dog looked up, met John's eyes. "OK, John."

Blue turned to Max and met his eyes. He and the other first gen fought about almost everything: politics, philosophy, the future of the race...but they agreed about John. It was good to see him put Rex in his place. Not surprising - not at all. But good.

The younger generation didn't take the Culling seriously. They'd been too young - they barely remembered the Earth labs or the Dogs that John and his team hadn't gotten out in time. Blue and Max had been 13 when the labs were shut down and the euthanasia had started.

The two of them remembered.

An electronic "ding!" broke the tension. Blue stood. "Dinner!"

Blue stepped to the kitchen unit in the tent wall and started pulling out plates. To his left Rex crowded in, reaching for a napkin.

Blue shook his head. The youngers might not remember, but he did - and he was NEVER going to give the man who'd saved his life - who'd saved his whole species - static about not doing enough.

If John wanted to take a vacation from responsibility for a decade, that was fine with him.

Chapter 5

2064: Andrews Air Force Base near Washington DC

General Restivo looked around the conference room. It was nice - nicer than anything he'd seen outside of DC. But then, plush carpet and mahogany conference tables were nothing special here in the city.

He checked the time. How long until -

The door opened and Restivo snapped to his feet. Even before she was fully
inside the room the president was already speaking. "Give me updates on the High Sprawl investigation."

"Ma'am, there's not much new since the last briefing. There really doesn't seem to be any sort of top-down power structure -"

The president pursed her lips. "That's bullshit - they can't have that much industry and infrastructure without SOMEONE in charge."

"We're using Social Gaze -"

The president settled into one of the deep leather chairs along the wall, somehow turning it into a throne. "Social Gaze?"

"It's a program that goes back sixty years or so - DoD created it to unravel Muslim terrorist networks -"

As soon as he'd said the words he saw the warning look in her eyes. Shit. "Sorry. Middle Eastern black market networks. It's a suite of data mining tools shared by the IRS, TSA, DEA, BATFEEIN, NILDON -"

"Data mining?"

How much detail should he give? "Uh - the tools search public databases, but they're also tied into every debit card purchase through FinCEN, every email and phone call through Stellar Wind, every vehicle trip through the carbon tax transponders. We augment that with data from the Caretaker camera network. All of this lets us tease out who the real movers and shakers in a network are, and who they -"

"So what does this have to do with the moon problem?"

"We're using these tools to understand the expats."

She leaned forward. "And what is it that you now understand about them?"

He resisted the urge to lick his lips. "With their black markets outside of FinCEN control and all the rest, we don't have as much raw data as we're accustomed to. We still don't know who's directing the allocation of resources. We also don't know how recruiting works -" He saw impatience gathering on her face and
hurried "- but we ARE seeing critical nodes pop up."

The president raised one eyebrow. "Go on."

"The critical nodes will tell us where the choke points are." He paused. "Where the money flows."

The president didn't smile - not remotely - but her features softened, just a bit. "Good. How much money? Tax receipts are down five trillion from last year, and eight trillion from two years ago. how are we going to get our missing tax revenues back from these thieves?"

Restivo was puzzled. "Ma'am?"

"Our tax revenues, general!"

"Uh - I just read the news, but my understanding is that the High Sprawl situation isn't the root cause of the shortfall -"

The president interrupted him. "General, you can't honestly be telling me that their tax evasion and their theft of productive assets has nothing to do with our economic problems?"

Shit. What had he gotten himself into? "No, of course not -"

The president's slate beeped and she checked it, smiled, and then tapped at the screen for a moment. General Restivo was careful to remain silent until she was done - the president's anger at being interrupted when she was chatting with her friends was legendary.

He glanced at his own slate on the table between them, but didn't consider it for a moment - God help him if he wasn't paying attention when she was ready to resume the conversation. He did, though, risk sneaking a look out the window toward the runway. While they'd been talking, Air Force One had taxied to the gate and the jetway was now extending out to it. He caught himself - it wasn't Air Force One until the president was on it; right now it was just an Airbus A505.

At length the president looked up and saw the plane. She stood and leaned toward him, almost but not quite invading his personal space. "So how are you
going to patch the budget hole?"

Now he did lick his lips. "I - the only assets we've identified are non-liquid. Tunnels, solar farms - it's all heavy equip -"

"Don't tell me about problems - give me solutions!" The president looked over the door where the privacy seal light glowed green. "We're running short on fuel, we're running short on food, we need to get more aid to California before the election. Make it happen, general!"

He took a breath. There was only one right answer. "Yes ma'am."

She turned and headed to the door. By the time Restivo had picked up his slate and turned, she was gone.

He looked out the window. On the far side of the glass the Airbus' engines spooled up.

Fuel shortage? Not so bad that the president couldn't fly to Taos every other weekend.

After a moment he shook his head. Not his problem; his duty was to serve the country.

**Chapter 6**

**Red Stripe Spacesuit Rental, Aristillus Crater, Lunar Nearside**

Eight different models of spacesuits on display stands lined the left wall of the shop, and the automated rack system behind the counter held uncountably more, all helmetless and scuffed with use. The clerk and the store manager stood behind the counter. The clerk swallowed. "I can't tell you how sorry I am. We'll do whatever we can to help -"

Hugh barely heard him - the words seemed to be coming from far down a long tunnel. He wanted the feeling of horror to go away. He wanted someone to tell him that this wasn't real. He wanted someone to say that everything would be all right. But that wasn't going to happen. There was no way to make it better. And this - this CLERK - was the one who'd caused it.
Hugh heard himself shouting at him, as if someone was speaking for him. "Help? You can't help. He's dead, and it's because of your suit!"

The clerk took a deep breath and spread his hands, a look of apology and shock on his face.

Before the clerk had a chance to say anything Hugh shouted at him again. "He was just climbing a hill, and the faceplate shattered, and he DIED!" Hugh turned from the clerk to the manager and hammered his fist on the counter. "You - you killed him!"

The manager rested a hand on the clerk's shoulder. "Sir, I absolutely agree that the suit failed, but you rented Airtights. Those are light duty suits with strict -"

"Don't try to excuse your defective...bullshit!"

The manager looked down for a second then back at Hugh. "Again, I'm so sorry - but none of our suits are rated for climbing. I looked at the records and I see that Jim offered your party armored suits..and that you declined." He paused, then turned to one of the display models hanging on the wall. "The Airtights you rented don't have faceplate cages, they don't have auto-tourniquets or spinal -"

"Stop explaining to me HOW you screwed up - I don't care! Allan died. How can you not understand that? That's - that's - you should be sued! You should be bankrupt!" Hugh felt his resolve grow and pounded the counter again. "You should be in jail, and someone competent should be put in charge of this business!"

A touch of anger clouded the manager's face, and then disappeared. "Sir, I agree that it's a tragedy - but the records -" He touched at a slate on the counter, spinning it around so that Hugh could see the signed rental contracts and liability agreements.

Hugh shook his head. "What the hell is that? Paperwork? I don't care about paperwork." The manager nodded once and tapped the screen. The rental contracts shrunk and were replaced with a video playback window. Surveillance video of the storefront from several days earlier began to play.

Jim, the clerk, spoke: "Rock climbing? No, I don't think anyone's
Alan nodded. "No one's done it before?" He looked over one shoulder.

"If you're going to go rock climbing, you might want to think about it."

Hugh nodded, stepped to the counter and reached for his wallet.

The manager tapped the pause button and the video froze. "I don't know what else -"

Hugh interrupted him. "That's - that's BULLSHIT. We didn't know anything about spacesuits. This was YOUR fault. This - this isn't over. We're going to sue you. Allan's family is going to sue you. You're not going to treat people like shit again. You people think that just because you're up here on the moon you can cut corners? You think you can put profits before people?" He stared at the manager. "You're going to learn."

The manager waited a moment then nodded resignedly. "I'm sorry to hear that, sir. I - ." He stalled, then continued resignedly. "Here's our corporate contact information, and here's our insurance firm - you can talk to them about the lawsuit." He picked up the slate and turned to leave the counter, then turned back. "Again, my condolences for your loss."

Hugh breathed heavily. They'd learn who they were dealing with.

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