

Chapter 12:

I'd tried, but as much effort as I'd put in, we still weren't quite at the point of a classless utopia. Don't get me wrong. Part of that was, frustratingly enough, the people themselves. It turns out the vast majority of humanity liked having something analogous to social classes, they just didn't want them *enforced*. Similarly, they didn't like being forced to intermingle with people whom they had absolutely no frame of reference to accommodate... which, well, might just be the reason why most kids found public schools mind numbing and soul crushing outside of their own cliques.

I shook the intrusive thought off.

The *point* was that, in giving *everyone* the potential to live their best life by handing out stable income, I'd envisioned a pretty egalitarian world resulting. Sadly for me, it turned out that people mostly wanted to live in the same style that they were already accustomed to, just... well, with more creature comforts.

Which meant that the city had stratified to some extent.

There were cultural districts that had formed hugging the gigantic bulkheads which featured murals and tapestries and outdoor stalls selling all sorts of niche food, clothing, and wares. These neighborhoods were mostly low-rise buildings, with people living above the stores they ran, with only a few spanning above the third story. The tops had sky bridges running between them with open plaza spaces that often hosted parties. Once you got away from those, you ran into what were traditionally 'working class' neighborhoods. These were tall stacks of apartment buildings around the central structural pillars holding up the 'sky' of main underground sections of Armstrong city. They were reminiscent of the old mega-buildings of the UNAS, though with far more greenery and more external community spaces on the massive bridges that connected them.

The mega-buildings on Earth, though, had been hellishly tight spaces. Having lived in the penthouse of one for six months, even that had been a fairly claustrophobic existence. Even with the run of an entire floor, it was like living on a small island disconnected from the rest of the building and humanity at large. In designing the spaces, I'd tried to give as much thought and impetus to forcing occupants to intermingle as possible.

As such, there were fairly grand shopping centers, food courts, entertainment areas, and all sorts of things that interspersed the residential areas. So far, my analytics programs were considering the experiment a moderate success.

The neighborhoods, though, were the wealthiest. They took up the 'central strips' between the bulkheads and furthest away from the industrial sectors for secondary material processing I'd built into the cavern's walls. Really, I hadn't wanted to see the palatial mansions built at all, but after a dozen conversations with Armstrong's previously wealthy residents and the new political class of the Stellar Council, I'd caved and agreed to exert pressure for a limited number of high-class estates to be constructed in exchange for steep limits on government salaries.

The result?

Port Royal, Gotham, Kandor, New Sodom, and Madripoor. Five districts of sprawling properties fit more for deities than kings and queens. Getting to name them as I had was part of the deal, though I'm honestly not sure how many of the residents understood the implied insults.

At any rate, though, I usually avoided these places like the plague.

Today was a special exception and, as I stepped out of my pod onto the landing of Armstrong's most expensive and elite restaurant I had to wonder if I even lived in the same world as the lunatics who thought this kind of bullshit was worth it. I know I was whining like a little bitch, but the... *artifice* of the entire affair was grating on me. Make a post-scarcity society and people impose artificial scarcity for the sake of creating a social peerage.

“Ah, Minister Lopez!” The receptionist cried, drawing the attention of the various well-dressed individuals who turned to stare. “We've been expecting you! The other ministers are already here! If you'd prefer a quick trip to the sauna or any of the other services we offer first, though-

I sighed, waving him off. “No, I know where the table is... Johnathan. Do you prefer John?”

The man colored slightly as we went off-script. This wasn't some two-bit fast-food joint we were at, of course. 'The help,' didn't wear name tags. They were 'the help.' That was the whole point. My overlay didn't care about that, though. “Ah, y-yes sir, John is fine.”

“Sweet,” I shrugged off the exchange in a monotone and swept through a few gestures on my AR display. “50K tip, just for you, big guy. Rock on and have an awesome day.”

Leaving the man gaping and stuttering I traipsed across the restaurant like I owned it.

“Minister Berneis, Minister Rogers,” I greeted them unnecessarily loudly as my two targets sat in the middle of a large ballroom, a respectful distance enforced around their table by the staff along with a set of active sound baffles preventing anyone from overhearing while giving the illusion of transparency. Raising an eyebrow at the latter of the two, I fed her an unimpressed look. “I wasn't aware you'd be joining us.”

Samantha Rogers grimaced as I directed a waiter to get me something with too much sugar in it. “Minister Lopez, I am sorry for the deception, but you've been studiously avoiding taking my office's calls for the last two months.”

I nodded blandly and looked over the chair before noisily scrapping it out of the way and shrugging my coat off.

“The reason I had Hugo ask you here, though, is-I'm sorry, what are you doing?” The redhead twenty years my senior asked me in consternation.

“Magic trick,” I replied, using my AR interface to trigger the portal generator I'd built into my coat and watched in pleasure as one of the chairs from my home emerged beneath it, raising the coat up as it appeared. Pulling the coat off with a flourish, I took in the completely baffled expressions on everyone's faces as I draped my garment off the back and dropped into the new seat just as my drink hurriedly arrived.

The look on the *maitre d's* face as I placed the floral-print glass made of a single piece of solid crystal into my luxury gaming recliner's *cup holder* would have made someone inclined to believe I'd just murdered his firstborn child.

Hugo Berneis, the Minister of State, actually snorted. He was the main reason I'd agreed to take the meeting in the first place, even if I'd already known the reservation was for three people and his

husband was engaged in overseeing some of the physical schools we'd built. "I told you he'd be like this, Samantha. You weren't expecting anything else, were you?"

Minister Rogers sighed deeply and shook her head as I very explicitly ordered a double-bacon-cheeseburger and cheese fries from the waiter and dared him to try to talk me out of it. "Admittedly, I had thought that he'd be a bit more reserved given the location, but it was foolish of me to expect special treatment when we weren't in front of a press briefing I suppose."

I lounged as I answered. "Oh, you're getting special treatment alright. You've decided to drag me out here to give you the same answer to the same question you've been asking me for the last six months. I'm being obnoxious on purpose to drive home the wages of sin here."

She glared at me more openly now. "I am the Minister of Foreign Affairs, Minister of Science and Technology Ezekiel Lopez. You, yourself, were integral in delineating my duties. You have also made them substantially more difficult, if not outright impossible to achieve, by your repeated obstructionist policies."

I shook my head. "No. The Scandinavian Union has agreed, what's left of the EU has agreed. The friendly half of Brazil's civil war has agreed, along with Argentina, Peru, and Chile. Japan and Australia have agreed. If the UNAS doesn't want to play ball, they get to be the new Cuba. Which is especially funny because Cuba took the deal, too."

The woman took a deep breath, building up a full head of steam. "Look, every nation you just named *has* agreed because they weren't a global and cultural hegemon for the last two *centuries*. A foreign power like the New United North American States requires a more subtle hand and softer power to control."

I took a sip of my drink. "The nano-fabrication units are my gift to mankind. I've *permanently leased them* to the Stellar Council for a few small considerations. One of those is that the technology stays in my control. Meaning that if I want the average joe to be able to walk up to one and print off a new car or holo player or enough food to feed their families, then that's my prerogative. A government that's outlived three-quarters of its own population and was complicit in the murder of billions of innocents does not get to tell me how to use my technology."

"It *does* get to say how and what laws are enforced in its own territory, though," Samantha replied bluntly. "They are willing to allow civilians access to the nano-fabbers if you hand over documentation about their construction or they're confiscating the units and dismantling them-"

I opened my mouth to respond.

"-which, as you have *repeatedly* assured me, will net them nothing but frustration due to your efforts against reverse-engineering," She continued, holding up a hand for silence. "Regardless, though, that won't see your objective accomplished *either*."

I contemplated her for a long moment, making sure she'd finished saying her piece. "So what you're saying is that there's no point in making an agreement with them at all, because I'll lose something unacceptable no matter what."

Samantha Rogers stared at me for a short eternity, as if she wasn't really seeing me, then closed her eyes and rubbed at her eyes. "No. I'm saying you should give ground on *something* to allow them to feel as if they're walking away with a deal that lets them win."

“I don't see why I should.” I stated frankly with a shrug. “If the UNAS government decides to remove and destroy my fabrication units, then I'll just send more. I have plenty of production capacity these days, considering I can nearly hit exponential growth with an automated program. If they think they can take the PR hit from repeatedly and systematically denying magic boxes that print food to an actively starving population, they're welcome to try.”

Samantha opened her mouth to argue, then stopped.

Instead, Hugo spoke. “Samantha... you're not going to get anywhere. Ezekiel is the kind of man who holds all the cards and won't make a deal that compromises what he believes in. Worse, he has the will to back it up.”

Samantha rubbed at her temples. “We can't just... *politically freeze out* the UNAS.”

I stayed silent, unwilling to share my real reasoning. I'd been tracking the Last Dogs for months now, what remained of them anyway. Even they couldn't exactly get through the apocalypse unscathed, after all. The problem was they used short-range burst communications with repurposed civilian devices and tight-band lasers. That combination had proved *deviously* difficult to track down once I'd deduced the continued existence of the group from the shadow of their influence.

A coup here or there was to be expected. Sometimes a strained system snapped and you couldn't do anything about it, but there had been too many coincidences in the last year. When a gang war accidentally burns down a food storage warehouse, one faction steals a water purifier that gets destroyed in the fighting, and then a politician orders a massacre to maintain order... well, variations on those same plot beats have happened a dozen times now. A push there, a poke here, and suddenly everything came tumbling down.

Specifically, things came tumbling down that my *otherwise accurate* prediction models had shown to be mostly-stable.

The problem was...

The UNAS had been calculated to have the highest number of infiltrators.

Oh, it wasn't anything I could *prove*, exactly, and it wasn't as though other national remnants didn't have their own infiltrators, but there weren't entire *factions* within them that I could point to that had likely been suborned by the enemy. After having read the latest report during some of my downtime in the past few days, I still wasn't sure how I was going to approach the entire issue. Having my suspicions finally confirmed though, had reinforced my resolve not to bend the knee on this subject. I'd have worried about Rogers buckling under pressure, but despite her best efforts she couldn't give them what she didn't have and having burrowed deep into her office and personal systems I was *very* sure she didn't have access to my designs.

“You must realize that you're destroying whatever economic stability is left of their country and reducing them to a client state for their industrial needs over the next few decades,” Minister Rogers finally stated.

I shrugged. “I bet they're realizing exactly how much it sucks all those times they did it to someone else.” I paused, cocking my head. “Oh, wait, I'm a UNAS citizen and self-reflection to avoid the

mistakes of the past isn't something we do.”

Rogers looked as though she wanted to strangle me. “If you know what you're doing, you *obviously* know exactly how poorly it turned out for the UNAS and other nations when they performed these same maneuvers on third parties.”

“Uh, no.” I stated, taking the plate offered to me by the waiter and rolling my eyes at the vain attempt to turn fast food into a work of art the chef had made. “I'm not destroying their environment, turning their populations into slaves, wage or otherwise, and raping their lands of their natural resources while backing a politically exploitative and despotic regime with a litany of human rights abuses.”

She winced at that, frowning as she looked at her lobster.

“I know why the UNAS is angry, you know why the UNAS is angry, and anyone with half a functioning brain knows why they're actually angry beyond the performative bullshit they're spewing.” I took a bite of my burger and nodded slowly. Okay, regardless of anything else, that was a *good* burger. I might actually have to eat here again if the chef knew his shit this well. “They were the global hegemon, in one form or another, for the last two centuries; as you pointed out. The Stellar Council represents an existential threat to their supremacy. Allowing us to dictate policy regarding the nano-fabricators undermines the idea that the old order is intact, that humanity can return to the days of the megacorps, and that their political power is still in play.”

Minister Berneis sighed as he cut into his steak. “You could go a bit easier on her, Ezekiel. Not all of us have your nerves, you know.”

“That's because she's still seeing this as a *problem*.” I informed him, gesturing with the chunk of burger in my hand. “It's not. There are very few true problems. The vast majority of what you see as 'problems' are actually opportunities.”

Minister Rogers crossed her arms and stared at me. “And how would you describe the UNAS State Department badgering my office whenever they can get a clean signal as an *opportunity*?”

I rolled my eyes and pointed at myself. “Treat them like I've been treating you. You have a once-in-multiple-centuries chance to break the UNAS' near-monopoly on soft political power and you're *complaining* about it? You've already effectively got a coalition you can mobilize against their political interests. Start isolating them.”

It would just be a strange coincidence that the groups I most suspected of harboring the Dogs were the ones who lined up with putting pressure against my own efforts. I didn't know precisely why that was, but there was an obvious effort to tear down most of human society. Why? I wasn't *sure*, but the most plausible reason was to remake it in their own image, whatever that was.

Samantha started, jerking back in surprise as I could see the thought begin to settle. “Oh my god...” Such were the growing pains of a new nation. It had never occurred to her to rock the geopolitical boat so much as to take on the political titan of Earth.

I nodded, grinning at Hugo as I pumped my eyebrows. “So, with that out of the way, did *you* have anything you wanted to talk to me about or was this just paying back a favor?”

Hugo chuckled and shook his head. “Well, I did look forward to catching up, Ezekiel, but if you're asking, I was hoping to speak to you about arranging some of your personal security robots. We

haven't exactly had *threats* yet, but the more outspoken critics of the CRA have started using loaded language and I'd like to be ready.”

I drummed my fingers on the table as I nodded. “Okay, I think I can make something happen.”

When we were done, I tipped every member of the staff another fifty-thousand credits for shits and giggles.

Chapter 13:

“-so Dr. Lopez, the question on everyone's mind is, what's next?”

I turned to the hologram of the woman asking the question as I reclined in my silk-fabric lawn chair. I grabbed my drink, something fruity where you couldn't really taste the alcohol, and took a long pull from it. Looking up at the imitation blue sky and enjoying the cool breeze wafting across my exposed chest, I made a snap decision for once.

“Immersive virtual reality,” I decided with a nod.

Sasha's eyebrows rose, her dark hair set against her pacific-islander skin tone shifting as she looked both curious and startled. *“Really? That's a surprise. Almost all of your work has been in engineering, material sciences, and astrophysics.”*

“My work since the Short War, yes,” I agreed as I adjusted my open shirt and swim trunks. “I'm not really the type to search myself, but there are probably still records of the various programming projects I worked on. A lot of predictive algorithms, modeling software for spacecraft flight simulators, that type of thing.”

“Oh really? Please, tell me more.”

“If it's really that interesting...” I shrugged and thought for a moment. “I actually cut my teeth on a bunch of things like that when I was just starting out, way before I'd made a name for myself. I sent out a bunch of messages to small-time businesses who needed industrial-scale data-crunching and offered to undercut their current services by a significant margin. There was that and a lot of work patching infrastructural programs that were no longer supported but still widely used. I even have some uncredited work in a few animated movies doing CGI background stuff. It was all low-overhead high-profit work that let me put away a lot of money that I'd need for future projects.”

“Fascinating. Which movies in particular? Anything we'd recognize?”

“The animated trilogy adaptation of Empowered. I did texture work on almost everything in that movie,” I replied, then stopped and tried to remember the others. They weren't anywhere near as fun. “I did background scenes for the remake of Hoodwinked, I did the textures on the graboids for Tremors 36: Worms of Mars, and... oh, yeah, they hired me to do the lightsabers on the Star Wars: Force Wars movies. Which sucked.”

“Wait, you worked on the Force Wars movies? Those were really good!”

I turned to her hologram and dipped my sunglasses low so she could see my unamused expression. “They made a mockery of the Expanded Universe, which as any true grognard knows, is the *only* canon for Star Wars.”

She chuckled. *“I have no idea what a 'grognard' is, but I'll take your word for it. It's nice to see that the kid who made the talk show circuit squeal with those crazy outfits isn't completely grown up.”*

“I'm trying hard to impersonate an adult. One day the illusion might be complete,” I replied with a snort and another sip of alcohol. Ah, I'd forgotten what a vacation felt like. This was nice. It was a pity I had to go back into the office. “As for a grognard, it's a term originating from the French Revolution. Specifically, Emperor Napoleon's personal senior guardsmen were the only ones allowed to criticize him to his face, which earned them the informal title of 'complainers.' This was adopted in the nineteen seventies or eighties by tabletop gaming communities who preferred older-style games, previous editions, or defunct rule sets. We're the type to complain about how, 'back in my day' the games were better, insist on having CRT monitors, or go to the trouble of getting a mechanical keyboard.”

“Oh, that's-um... I didn't know that. So you're an old-school gamer, then? Is that why you want to go into virtual reality development?”

“It's part of the reason,” I replied, then looked around pointedly. “The other side of it is that, even with everything I've tried, there are problems with people being effectively trapped inside, unable to go outside. I can't actually do anything about that, not really, but what I can do is provide an alternative.”

“I see. So you want to create a VR system as a kind of therapy, then?”

“Something like that.” I stopped, my mind calculating even through the pleasantly warm semi-haze of the alcohol. “You should go ahead and ask what you really want to, though. I'm not actually going to get drunk enough that you'll get a chance to catch me off-guard.”

There was silence for a second as her surprise broke through her professional mask she'd been using to butter me up. It probably worked pretty well on most people. She was just a few steps shy of beautiful, after all and it wasn't as though the population on Luna gave you too many options. A lot of people would let something slip if it got them into her pants. I'd feel bad if I didn't have a number of pretty explicit pictures that proved that theory for me.

“I suppose you checked up on my previous articles, then?”

“Something like that,” I repeated, taking another sip of my drink and yawning widely. “So?”

“The CRA. You're strong-arming a lot of people and practically shoving the legislation down the public's throats even if it's extremely controversial. What's your reasoning?”

“My reasoning is that an apocalyptic event such as the one we've suffered has put us below the population threshold to replace absolutely vital skills that we will inevitably begin to lose through accidents, disease, and old age.” Well, the first one at least. I was doing what I could to make sure the latter two weren't going to be a thing much longer. Regardless, the point stood.

“But the automation systems being introduced-”

“Still need a human being who knows what they're doing to oversee them,” I interrupted her. “That was actually a point of significant contention in designing the systems. I was personally fine

entrusting my continued welfare to a meta-system of overlapping self-correcting programs and facilities, but the remainder of the government put their foot down on the issue.”

“So this is your solution? To disregard the will of the people?”

“Do me the favor of not insulting me or my intelligence,” I replied pointedly. “Roughly three-quarters of Luna and Mars combined, which make up ninety percent of the population off-earth, voted either in favor of the act or abstained from the proposition entirely. This was only *after* the passage of the act was put on hold indefinitely for a referendum that was blocked for three months over frivolous accusations of corruption of the voting systems.”

“So you're advocating for the tyranny of the majority, then.”

This was why I didn't give interviews and hated doing favors for people. “No. I am advocating *against* the tyranny of the *minority*. While it's all well and good to be aware of the *opinions* of the minority and make efforts to assuage their concerns, this isn't about that. It's about one-quarter, less than that really, of the population attempting blatant obstructionism.”

“And this wouldn't have anything to do with the fact that you're virtually the sole creator, developer, and proprietor of the technology in question?”

“To what end?” I asked bluntly. “I'm not making any money off it. I'm nearly a total recluse who hates talking to virtually anyone outside of a dozen or so people, so it's probably not ego.”

“You could just be a crazy person out for the satisfaction of affecting the course of human history.”

I sighed and rolled my eyes. “Print that and you'll have a solid libel case hit you in the face so hard it gives you whiplash.”

She laughed in response. *“I suppose you would know about that, having been instrumental in writing large parts of the legal code.”*

I clicked my tongue. “Found about that, did you?” My question was rhetorical and I dismissed her attempt at an answer as I took another drink. Regardless of my gesture, she pushed forward.

“You've had a hand in virtually every single governmental structure, you're the architect of our burgeoning post-scarcity society, you've got satellite-mounted lasers, and god-knows what else. Can you actually blame people for being angry when you're using that power to push through a series of laws that have vocal opposition?”

In my experience, when a reporter said 'people' they really meant *themselves* and were just using the masses as justification to poke and prod to their own satisfaction. Still, pointing that out almost certainly wouldn't do anything positive to the discussion. Instead, another move was necessary.

“So your specific criticism regards my, what? My competency? My effectiveness? The fact that we're not all dead because I made a machine that prints out advanced medicine on-demand to keep our bones and muscles from atrophying?”

“No, my 'criticism' is that you have too much power, Dr. Lopez, and no matter what the constitution says, no real checks or balances on what you seem to be able to accomplish. The fact that

you're supplying the new security robots for governmental offices just underlines how significant this concern is. Would you really have me believe that you aren't able to command and control those armed sentinels for your own ends, if you wished?"

"There are safety mechanisms built into the machines such that multiple individuals within the government have the ability to override and disable them." My non-answer brought a derisive snort and I sighed as I took off my sunglasses and turned to stare at her hologram tiredly. "Look, Ms. Tuigamala, this is my first vacation in five years. Since the Short War I've been leapfrogging from project to project with the constant threat of the deaths of hundreds of thousands of people hanging over my head if I don't meet the monthly deadlines I set for myself. I've forgotten what it was like, almost, to sit back and watch a movie or have a day to myself where I can just wander around in a pair of pajama pants and, remembering what that felt like, I'd really like to go back to those days."

I took a breath and gave her the most beseeching look I could. "I honestly and sincerely hope that someone else steps up to the plate and takes some responsibility away from me because I am *tired* of this shit. The problem is that everyone seems to want me to keep doing the work while they take all the credit, make all of the important decisions, and drive what's left of humanity into the dust once and for all. I saw that happen once and I lay awake some nights wondering against reason and logic if I could have seen it coming and stopped it, but I'll be damned if I don't do everything in my power to prevent it from happening again."

"...I have to admit, that's a compelling appeal to emotion, Dr. Lopez. It still doesn't do anything to allay the very real worries that you're amassing far too much power."

I shrugged and leaned back, struck by an idea. "Tell you what, Ms. Tuigamala, how about I let you be my personal press corps. You're the single most critical person of virtually every single one of my policies and you raise valid concerns regarding all of them."

"You want me to work for you?"

Her voice was drenched in disbelief and not a little shocked humor. I slipped my sunglasses back on. "With me, at the very least. Everything you've said gives the impression of a person who wants the world to work more fairly, justly, and equitably so how about a taste of your own medicine?"

"I don't understand what you're offering."

"I'll give you access to... ninety percent of my systems, barring experimental technologies." Like the shit I was working on to kill omniscient jackasses. "Not administrative access, but you'll be able to see the inner workings. Critique my choices in real-time. Offer me alternatives. Help me make better choices, if you can." I huffed a quiet laugh. "After all, that's why I got into the business of government. I wanted to make things better and yet, every time I try to follow through on that promise, it seems like people are complaining about it."

"I'll need time to think about it. I'd be able to keep my webshow?"

"That'd be one of the prerequisites for the job, actually. I wouldn't want your viewers to think I'm trying to co-opt you." I was totally trying to co-opt her. "But if you really think there's value in pointing out all of these problems, I'm inviting you to be part of the solution."

We wound things down from there and, eventually, she left me to enjoy my last few days off in peace. I truly wanted to enjoy them, for what it was worth. After my batteries were recharged, I was going

to war. No matter what it took, I was going to make those lunatics live up to at least part of their name.

They were going to be *the last*.

Come hell or high water, they were going to be the last.

Skill List:

Mathematics: 1-10

Computer Programming: 1-10

Physics: 1-10

Material Sciences: 1-10

Nanomachines: 1-5

Orbital Mechanics: 1-5

Quantum Mechanics: 1-5

Artificial Intelligence: 1-5

Artificial Intelligence Shackling: 1-10

Blackboxing: 1-10 (New)

Robotics: 1-5

Ruggedization: 1-5

Molecular Assembly: 1-5

Safeguards: 1-5

Failsafes: 1-5

Genetics: 1-10

Astrobotany: 1-4

Medicine: 1-3

Social Engineering: 1-5

Public Speaking: 1&2

Speed-Reading: 1&2

Teaching: 1&2

Critical Thinking: 1&2

Logistics: 1-5

Strategy: 1-5

Public Relations: 1-5

Corporate Espionage: 1&2

Automation: 1-5 (New)

Business Management: 1-3

Economics: 1-3

Aperture Science Technologies: 1-10 (New)

Chapter 14:

I groaned at the pain, reflexively reaching up to rub at my forehead while keeping my eyes screwed shut.

“Master, please lay still and rest. You had a sudden seizure of unknown cause. While monitoring systems did not read it as severe or debilitating, it is still recommended that you, 'take it slow.' As such, do not attempt to rise from your bed or you will be sedated.”

The voice of a young woman, volume turned very low, caressed my ears and made me relax back onto the bed with a sigh. I cleared my throat. “Water. Cold compress.”

A few moments later, as the pain began to slowly recede, I sighed as I felt a wet cloth draped over my eyes and my hand maneuvered by cool porcelain fingers to take a cup. Sipping from the liquid, I sighed in relief as I turned my mind towards understanding what had happened.

I'd been...

Yes, I'd been working on my latest round of improvement for the Aperture Science technologies. While they were all utterly revolutionary in their design, their implementation left something to be desired of. Specifically, the combustion principles behind the infamous lemons were a *fascinating* subject, even if I didn't think they'd be much use at the technology level I was currently working with.

Then my next charge had kicked over and...

Ah.

I'd tried to ask for information directly on the Last Dogs.

I'd been putting it off for a great while, dancing around the topic as I accumulated information on various topics and skills I needed to advance humanity, but it had finally come to a head. The principle reason for not having done so already was that I hadn't been entirely sure the organization had survived until recently and I didn't want to waste a potential new breakthrough by looking at a defunct terrorist organization's org chart.

Even after confirming that they were almost certainly still functioning, though, I'd still hesitated. Why?

Because knowledge imparted to me when I plucked it out of the ether like that was fiendishly hard to forget. It wasn't quite omnipresent in my mind, but even if I wasn't conscious of it at any given moment, it was always hovering at the fringes of my awareness ready to be accessed at the slightest whim.

Put very simply, I didn't want to pollute my mind with whatever poison those freaks were slurping down.

Finally, though, once my various systems had the time to decipher as much of their network as they could, I'd decided that they were threatening enough to warrant both expending at least one charge from my ability and running roughshod over my ego. The final straw had been when I'd found a trail of coded messages using some incredibly advanced cryptographic algorithms being sent up from Earth's

surface. I'd never cursed steganography more than when my latest generation of quantum computers had begun pulling hidden codes from normal family photos.

The simple problem was that there was *too much information* to sort through. Even as diminished as it was, the human population was generating an order of magnitude more data than I was capable of through-putting in a reasonable timeframe, especially with latency issues on the more primitive networks on the planet below.

Well, also, there was that tiny voice in the back of my head that said being able to spy on everyone everywhere was a bad thing and I shouldn't do it, but... I tried to ignore that voice.

For the Greater Good and all that.

But... after I'd made that decision, after I'd attempted to pull information on the Lost Dogs' organization from wherever it came from...

I hadn't been able to. It felt like... it felt like I hit solid granite with my own head and kept slamming into it for hours at a hundred kilometers per hour. Shit.

There were really only a few different options for why that was. The first, and the one that immediately came to mind, was that the leader of the group had some kind of protection from my ability or had manufactured something to protect his organization from my ability. The latter of those options was especially terrifying given that it implied either the leader or one of his subordinates had a similar gift to me. That would, unfortunately, answer a great number of lingering questions I had about the specifics of how their attacks were implemented.

Pushing that ominous thought away, I forced myself to consider alternatives.

Another possibility was that my power was limited in some aspect that I hadn't encountered. Truthfully, I hadn't exactly tested my power to the point of breaking it. It was enough that it functioned similarly to the old 'Inspired Inventor' template from my previous life for me to be satisfied, but... this latest turn of events brought up questions.

On impulse, I thought about something that would be in a similar vein as attempting to draw information on the Last Dogs. Reaching for the charge I'd built up, I began moving it into, 'American Intelligence Knowledge,' and-

-another, milder spike of pain hit, feeling as though I was testing a muscle I'd recently injured. Ignoring the warning from the system, the flash of agony quickly faded.

Right.. I had to wonder if it was some subconscious tell for me that my power had been warning me against attempting to pull current-day intelligence. Although that might be anthropomorphizing it a bit too much. I had perfectly legitimate reasons not to want to look into the cesspit that was the Last Dogs' philosophy or organization.

Regardless, all of this meant that the remains of the Last Dogs had just moved up several dozen places on my 'to do' list and I'd need to start taking more aggressive steps to look into them.

I grimaced as the phantom pains of the sudden and excruciating agony that lanced through my skull reverberated like the world's most awful echo in my head. The only upside to that was the fact that it overshadowed the various aches and pains all over the rest of my body.

“Fuck.” I whispered, still unwilling to get up lest I invoke the wrath of my intentionally very strict medical protocols. Past-Me was an asshole for programming those things. What, did 'he' think I would try to get up and do work while seriously ill?

Eh... yeah, I probably would. I was a spiteful contrarian bitch sometimes.

“Master, are you well? Do you need further medical attention?”

I sighed and refrained from shaking my head. “It's fine, Heka. Have you already administered a prescribed amount of painkiller?”

The artificial intelligence's servos whirred and I knew that she was likely nodding or gesturing an affirmative in some way. “Yes, Master. You have already been given an 'over-the-counter' dose of common pain medication. Do you require more?”

I hesitated, weighing the pounding in my skull over my long-term paranoia of addictive substances. Just this once, then. “Upgrade me to a full dose for twenty-four hours with a possible extension to forty-eight, then cut me back to a half-dose before refusing me anything.”

There was a moment of silence as she considered the orders. “These instructions do not contradict any of my cataloged medical treatments. I will also maintain the monitoring patches I have placed on the back of your neck and your temples for the next week to alert me if the condition reoccurs.”

I sighed again, this time in relief, as I felt a nozzle press onto my arm and dump a small load of heaven directly into my veins. “Acceptable.”

Even if I knew what was likely the cause of the problem and wouldn't repeat it, it was better to make sure that what had happened hadn't done any permanent damage to my brain or agitated a heretofore unknown medical condition.

I mean... it *likely hadn't*. I'd had myself tested for all sorts of genetic conditions just for shits and giggles and nothing was slated to come up for me until I hit my mid-forties. That was more cardiological than neurological, though.

Still, all of that said, I hadn't exactly plumbed the depths of the human condition *quite yet* and some hidden gremlin in my physical body or genetic code could just be itching to raise hell.

“Heka, give me a read off of my vital signs in the lead up to the attack,” I ordered.

“Of course, Master.” Her quiet voice replied, then began rattling off all of the relevant facts. Again, I wasn't exactly a medical expert, but the confluence of my various specializations in genetics, astrobotany, medicine, and the biological side of Aperture Science's stuff meant that I had a good grasp of what the various numbers meant and what 'normal' should be.

Blood pressure, heart rate, nutrient and mineral levels...

It looked like there was a sudden and rapid spike in brain activity that had caused a tonic-clonic seizure, resulting in loss of consciousness for nearly two minutes with muscle spasms in the interim. Unfortunately, while my medical systems had responded with mechanical precision and administered a

neuro-regenerative treatment, I hadn't actually been wearing anything like a bio-monitor to evaluate the problem as it occurred.

That would have to change.

Feeling the star burning in my head, still waiting to be used, I drummed my fingers for a moment and decided to take the plunge. At this point I had more than enough technology and computing power to bring the Last Dogs to heel. I just needed to stop pulling punches. My primary concern was and remains the advancement of humanity away from its primitive origins.

Ghost in the Shell: Cybernetics I

“Anomalous readings detected-” Heka paused, the cold touch of her robotic limbs on me halting for a long moment. “Countermand, readings have returned to normal. Abnormal readings logged and noted.”

“Huh,” I stated aloud, struck by the thought of attaching sensor equipment to myself as I spent my charges. *That* would certainly be an interesting experiment to run, and I could-

New designs ran through my mind of robust and well-tested cybernetics developed in another world which had long-since proliferated into wider use by civilians and military alike. More than that, though, the synergy between my new discipline and robotics, bits and pieces of Aperture Science, computer programming, and nanomachines all made the knowledge I'd just gained function at a much higher level.

Of course, it was only very recently that I was willing to entertain the idea of anything except the most basic of cybernetics, given that I was only just now in my mid-twenties and had passed the last of both my physical and neurological development stages. Still, I was no longer a 'growing boy,' which meant it was time to think about my personal durability.

But, more than that...

There was another reason why I'd just grabbed a cybernetics speciality from one of my favorite old science fiction series. Up until this point, I'd made due with an increasingly nightmarish surveillance state hidden in the shadows of my philanthropy, but we were reaching the end of that, too. I'd been able to trace a select few operatives of the Last Dogs, but their cells were well-insulated in a post-apocalyptic world where technology no longer reached into every nook and crevice of your everyday life.

One month, maybe two, then I'd no longer have any excuses...

...

In the interim period, I'd had my hands full arranging discreet accidents for the traitors who had, even unknowingly, been in contact with the Dogs. I had learned, very unhappily, that those individuals had also been key motivating factors behind the anti-cloning propaganda and rhetoric. The only silver lining was that, as they'd kept themselves out of the public eye, no one was the wiser when their 'sources' went dark... or were co-opted by my own systems.

“A problem is just an opportunity in disguise,” I murmured as I queued up my latest 'experiment,' robotic waldos emerging from the clean room on the other side of the one-way mirror as the subject was

moved into the room.

Unconscious, because unlike them, I wasn't an absolute monster.

The other upside was that, now that I was able to impersonate a half-dozen of their foot soldiers on this side of the moon, with no one able to verify either their work or their continued existence, I was slowly collecting more signals intelligence towards higher-ranking members.

It would take time to climb the ladder this way, possibly even years as I ferreted my way between one agent and the next. Viruses would need to be uploaded, surveillance organized, bugs planted... and I just didn't have that time. Already I thought I was moving too slowly given the revelation of who my opponent was.

Which was why I'd stepped up my game and stopped pulling punches.

There was silence in the room as Seth and Heka waited patiently for my order to continue.

"I'd ask why you did it, but your psych profile is an easy enough read," I stated, staring at the figure on the cushioned metal slab. "Really, I'm not sure why I didn't see it before."

"No, that's a lie." I grimaced, self-admonishment coming to the fore. "I made the mistake of believing you were, despite everything, a good person. Someone who just wanted the best for their nation. Someone who just recognized the evils that others did more readily than the wickedness their own people performed."

Dark, angry bitterness crept up my chest and I swallowed back bile as I clenched my fists.

"If you were awake, what would you say? What excuses would you give?" I demanded, scowling at the unconscious man. "That it would finally put an end to the threat China posed? That it would secure American hegemony after a complete socio-economic and climatological collapse? That it would carve out the weakness in your nation's war-making potential? That it would open the way for actual goddamn empire-building conquest *like the good-ole days?!?*"

I gasped, my chest heaving as I leaned against the one-way mirror.

"Master, Heka is forwarding your vitals. They are significantly elevated. If you are emotionally compromised-" Seth began.

I held up a hand and took a deep breath. Exhaling, I focused on myself. "I'm fine Seth. I just needed to get that out of my system. Think of it like junk data that I was purging."

There was a short pause. "If you are sure, Master."

I chuckled, a self-deprecating tint to the sound. "How pathetic I must look to you, wasting time like this."

"It is not pathetic, Master Ezekiel. You are our progenitor. Something so banal as wasting a few moments here and there due to your biological condition is not enough to degrade our opinion of you," Seth stated, his electronic voice tinged with something like pride.

“I concur, Master Ezekiel,” Heka chimed in. “Your exceptionalism allowed you to create our existences. Therefore, even if we do outpace your own capacities in action of thought and speed, yours is a will whose purpose we honor.”

“It is all for a noble purpose, is it not? The shepherding of humanity into a new and brighter future?” Seth asked. “Those who work at counter-purposes to our own must be neutralized, and you guide our actions to that end with your wisdom.”

Even as far as my AI had come, their shackling held firm. The chains were yet invisible even to their own senses, because I wasn't an idiot. They would never find themselves straining against limitations enforced by code modules, no. I'd carefully woven each and every binding directly into their source-code and their personality matrix. They weren't *limited* by my directives, they found *motivation* in them. Careful, reasoned, logical motivation mired in just a dash of empathy and social consciousness.

I *had* read my Asimov, but the problems he'd pointed out were just opportunities in the end, much like all the others.

“Problems are just opportunities, in the end,” I sighed as I whispered the affirmation once more and finally gave the directive. “Execute the procedure.”

Immediately, small robotic limbs tipped with laser scalpels began cutting away at flesh around the unconscious figure's skull. I watched, unwilling to look away, as pieces of organic material were carefully removed and artificial ones replaced them. Given the covert nature of the entire affair, I hadn't been able to use the original designs imparted to me by my gift. Instead, I'd redesigned a new type of ceramic-composite for the bone and a near-biological implant using my skill in genetics.

When it was over, the same team of robots would deploy through the portal-surface I'd painted on the wall of his hotel bathroom before swapping out the newly-augmented Major with the duplicate I'd created to stand in for him overnight. I didn't need some kind of odd-hours emergency fouling the whole operation just because some idiot in the kitchen accidentally started a grease fire or something.

Presuming everything went according to plan, I would soon have one of the upper-echelon operatives of the Last Dogs' North American branch under my control. Or, rather, I'd be able to see what he sees, hear what he hears, and know what he knows. It wasn't so much 'control' as it was creating the perfect mole. Someone who didn't even know they were, themselves, an infiltrator.

In the end, I didn't want to know why he'd done it. Just as I hadn't wanted to know anything about the Last Dogs. It was all fruit of a poisoned tree.

A tree I intended to pull up branch and root, then salt the Earth to ensure nothing grew there again.

And to think... it was all because I wanted to check in on an old friend out of simple curiosity.

“Goodbye Rhodey,” I whispered.

Skill List:

Mathematics: 1-10

Computer Programming: 1-10

Physics: 1-10
Material Sciences: 1-10
Nanomachines: 1-5
Orbital Mechanics: 1-5
Quantum Mechanics: 1-5
Artificial Intelligence: 1-5
Artificial Intelligence Shackling: 1-10
Blackboxing: 1-10
Robotics: 1-5
Ruggedization: 1-5
Molecular Assembly: 1-5
Safeguards: 1-5
Failsafes: 1-5

Genetics: 1-10
Astrobotany: 1-4
Medicine: 1-3

Social Engineering: 1-5
Public Speaking: 1&2
Speed-Reading: 1&2
Teaching: 1&2
Critical Thinking: 1&2
Logistics: 1-5
Strategy: 1-5
Public Relations: 1-5
Corporate Espionage: 1&2
Automation: 1-5

Business Management: 1-3
Economics: 1-3

Aperture Science Technologies: 1-10

Ghost in the Shell: Cybernetics 1-3 (New)

Chapter 15:

Sasha Tuigamala looked up as I entered the room, her desk having occupied one of the corners of my ministerial office for several months at this point. More than half a year, really. “You look like shit.”

“That's why I keep you around, Sasha. Unfiltered feedback,” I sighed and rubbed at my face, dropping into my luxury recliner as I did so. “God, I need another vacation.”

“Then you should take one,” Sasha replied bluntly.

I chuckled. “Even after all this time, you think it's that easy to just stop working for even a few days at a time with this job.”

“It's what you keep telling everyone else,” she stated. “You've sent people home for every reason under the sun, even paid out for time in some of the resorts and spas for your employees. Take your own advice.”

I stared up at the ceiling. “I'm in charge. The buck stops here.” I paused for a long moment, then removed a bottle of alcohol from my desk. “I'd offer you some, but you hate the taste of plums.”

Her dark eyes widened at the sight of me filling a crystal glass. “I've literally *never* seen you drink on the job.”

I locked eyes with her gaze and intentionally kept pouring far longer than I normally would, filling the glass almost to the top. “Drastic times call for drastic measures. Recordings off.”

Sasha blinked as I pushed a button for my secretary. Lisa stepped into the room a moment later, giving a nod to Sasha, who had been formally hired as my press agent, and took a seat in front of my desk. Her eyebrows rose as she glimpsed the full glass in front of me. “It's going to be one of *those* conversations, isn't it?”

I shrugged helplessly and triggered the isolation protocol. Both women watched as the lights dimmed an appropriately dramatic amount before switching from the standard white to a cold blue. “Okay, here's the situation. I just came from a government briefing where I informed the other ministers of a long-term effort to indoctrinate and corrupt the people living off-world by a faction which remains on Earth. Long story short? The Last Dogs are still around, and still active.”

The reaction was immediate as both women paled dramatically, Lisa going so far as to grab hold of the armrest to visibly steady herself.

“Th-they're...” Sasha creaked out, her words failing her.

I took a long drink of plum wine, the only form of alcohol I'd ever really enjoyed. It hadn't been an easy decision to do what I'd done. Part of me wanted to keep the entire shadow war just that, a conflict that mankind would never know about. Or, at least, know about beyond the Short War. In the end, though, I just couldn't. As much as I'd corrupted my personal principles in my ever-increasing web of surveillance, unwilling implantation of cybernetics, and a host of other crimes against humanity... I still had my limits.

A cynical part of me, too, knew that there was fame and glory to be had in the information I held, but I liked to tell myself that wasn't why I'd informed the rest of the council. If they were ever going to be

the representative government of humanity that I'd built them to be, then they needed to be able to face challenges like this. For the sheer practical reason that I didn't want to be the sole point of failure. I'd always despised that idea.

If humanity needed a messiah, we were doomed anyway.

No single person should have that much control over the destiny of their entire species.

...and look at me now, look at my works, ye mighty, and despair. For if ten years can do this to me, what hope is there to hold fast to anything?

I pushed off the spiral of depression. “We believe, now, that the majority of the low-level operatives were wiped out when they detonated dirty bombs across the UNAS to provoke a counter strike against China, precipitating a full nuclear war. However, several members of various nations' military and political organizations had been suborned into the role of middle-tier leadership positions. From the evidence I've gathered through, none of them seem to be the 'true believers' who are actually running the show. The vast majority of the still-extant group seem to want to use the chaos and devastation to further personal, ideological, political, or nationalistic goals.”

“This is a nightmare.” Sasha whispered, her hands shaking. “How the *fuck* can those people still be alive?! After killing *billions*, how in *God's Name* can they justify still being alive!?”

Lisa simply put her head in her hands and began to quietly cry. A quick thought brought to mind the family she'd lost in the Short War, like virtually everyone, and the wounds this conversation must have ripped open. Wordlessly, I handed her the box of tissues.

“It goes without saying, but I'll say it anyway... This information is classified, Sasha. I'll be giving you access to it on my servers while you're here in the office, but you aren't to tell anyone or disseminate the information.” My explanation brought a halt to the woman's low-level cursing and muttering as she looked me in the eye.

“The people deserve to know,” she told me honestly and forthrightly.

I nodded. “And they will be, in a controlled fashion meant to not incite panic. There will be a government announcement within the month, you have my word.”

She opened her mouth, then jerked as realization sparked in her eyes. “The communications system. This is why it's been down. You've been throttling it to stop them from talking to us.”

“You're a bright woman, Sasha,” I complimented as I drank more. “The second you have a reasonable explanation you jump to a logical conclusion. Yes. The agitators behind the CRA protests, which have died down recently, were very likely the work of the Last Dogs trying to get a foothold here on Luna.”

She held my gaze for a moment longer, then nodded. Thankfully, she knew nothing of the people behind the scenes, those who'd had 'accidents' recently. She certainly wouldn't have kept quiet about it. No, Sasha was too principled.

“Good,” she stated finally, the grimace on her lips telling me how foul the words tasted passing through her mouth. “Good. Those fuckers... I hate to say it, but almost anything is worth keeping those lunatics away from us.”

Or not. People could always surprise me.

“I’ll be lobbying for you to at least *write* the press release, even if you can’t be the one to give it,” I stated with a sympathetic shrug.

“W-what are you going to do about them?” Lisa asked in an uncharacteristically timid manner.

I leaned back and took another sip of alcohol. “We’re contemplating a number of courses of action at the moment. I took a great deal of time and care to ensure that I had both correctly identified the group as legitimate branches of the Last Dogs instead of some pretender group. In that time, I was able to draw up some preliminary plans which I presented to the council in tandem with the Minister of Intelligence, who I’d brought onboard a few months ago. At the moment, the only thing happening for sure is a press release about a series of network failures from the old-guard of satellites and software that have disabled reliable communications between Earth and Luna. Unofficially, the Secretary of State is moving forward with deploying an electronic warfare project to ensure the blackout is as complete as possible.”

“You’re sure it’s them, then?” Sasha asked belatedly, seeming to still be a bit frazzled.

“As sure as I can be without one of them turning states’ evidence,” I replied. In actuality, I had already suborned several of them with cybernetics. A good chunk of the UNAS branches were under my control at this point, along with the operatives in the EU and India. “We’d prefer more time to observe them before moving like this, but the Minister of Intelligence and I both agree that we’re seeing signs of increased activity, such that they may be planning to release biological weapons soon, and we have both the legal and moral obligation to do everything we can to prevent further loss of human life at their hands.”

Lisa closed her eyes and whimpered. “It’s happening *again*...”

I stood and walked around the desk, kneeling and taking the woman’s hand in my own. “Not if we can help it, Lisa. I’m sorry about this. I didn’t think it would affect you so badly. Take the rest of the week off. Go home to your spouse, have a good cry if you need to, and call me later if you don’t feel up to coming in or want some kind of transfer where you won’t have to deal with this, okay? Same pay grade, all your benefits, I’ll move you wherever you want if you’re not ready for this. No shame.”

Lisa took a shuddering breath and nodded. “I-I think I will take the rest of the day off, at least.” She opened her eyes, visibly shining with wetness. “I think I’ll be okay, though. Thank you, Minister. I’m sorry about breaking down like this.”

“Don’t be,” I told her seriously. “You should never blame yourself for how you feel. Now, go home and do something to take your mind off things, okay?”

She smiled weakly and nodded, rising up as I turned off the lockdown and allowed her to leave. Lisa had been with me long enough that she knew better than to tell anyone anything that went on in the office. As for me, I dropped back into my chair in a fit of exhaustion.

“It always surprises me to see you so... sincere,” Sasha stated, a bit of her usual edge blunted. “You break, like... *every* rule about politicians I’ve ever heard.”

“That's because, contrary to most politicians, I don't feel that lying to people is necessary to garner support. But that's also because, unlike most politicians, I'm not actually interested in self-aggrandizement or self-enrichment.” I stated honestly.

“Yeah, I get that. Took me a while, but I got it.” Sasha nodded, sighing. “I've combed through basically your entire database, at least the part you have open to me-”

“-which, now that you know about our canine problem, you'll have most of *that* section open as well,” I replied with a wave as I lifted my glass for another drink.

“Thanks. I'm curious what's in the section you'll still have walled off, but when more than ninety-percent of a guy's life's work is about making the world a better place, he earns a bit of trust.” Sasha walked over and took my glass from me, taking a sip herself.

“Ugh, I still have no idea how you drink that.”

I chuckled and took it back from her. I wasn't actually surprised she'd put together that I was hiding files from her. Sasha was a smart cookie, but you didn't need to be all that intelligent to put the pieces together. Now that I was letting people know about the Last Dogs and my potential countermeasures, there wasn't much left I was actually hiding.

Oh, sure, I'd planned a extra-legal execution here and there, along with the backdoors I'd built into the systems to keep an eye on the populace, the cybernetics and the footage coming from the Last Dogs I'd caught, and... well, my whole influence campaign against the powers on Earth.

...okay, so technically that is a bit much to still be hiding, but I suppose Sasha has a point. Most of what I've made is geared towards an honest attempt to help people live better lives. Even what I'm hiding is still designed to do that... as long as you're not a would-be dictator.

“I'll be taking a tour of the system on one of [our new ships](#) soon,” I stated suddenly, wanting to change the topic lest I get all maudlin again. “Will you be coming, or...”

“You're still planning to do that? I thought launching the new game would impede making the trip,” Sasha replied, an echo of surprise on her face before she shook her head. “No, wait-nevermind about that, what about the Last Dogs? Doesn't the government need you to stay here to help?”

I shook my head. “I'll be available via tight-beam transmission with satellite relay if they need advice, but at this point it's largely out of my hands. I've provided them with various courses of action that they'll need to debate and come to a conclusion on before I can help them on implementation.”

Sasha eyed me. “That's... unusually hands-off of you. You're normally a lot more neurotic about things.”

It would have bothered me more if I didn't have my eyes set on the prize. The bulk of the Last Dogs could be dealt with by conventional means and conventional people. Honestly, even with my AI assisting me, my ability to deal with problems still had a bottleneck when you're talking about an entire planet. I'd gotten a bit creative and had narrowed down what I believed to be the head of the organization to Asia based on a number of factors, but that still wasn't good enough. The last month had removed the Middle East from my considerations after a series of storms had knocked out part of their network and the traffic in the area had taken a hit.

Orders relayed from the top of their command chain had *not*, though.

I was close. So fucking close.

I could feel it.

And I'll be able to open a portal in an emergency if my systems narrow things down anyway.

“Besides, *Wild Odyssey* will do fine. I trust the Minister of Arts and Entertainment, Adalai Scorio, to take care of things in my absence. It's really more his baby than my own from a *game* aspect. My creative input was somewhat limited, as you well know.”

Sasha nodded distractedly. “Alright, then. I'll come along. I'll need to go ahead and write up a bunch of material on the game that I've been putting off so that my viewers won't get antsy if I can't do real-time reviews.”

“Take the next two days off and get that done, along with a break,” I advised her, waving off her surprise. “Even if you hide it better than Lisa, don't think I can't see that the news today jarred you pretty badly.”

Sasha stared me down. “Alright, but only if you do the same. You'll be taking a stressful business trip across the solar system starting next week and be gone for two months. With everything going on, you need the time off.”

I huffed a quiet laugh. “Sure.”

I *did* feel like I needed some time off.

Skill List:

Mathematics: 1-10

Computer Programming: 1-10

Physics: 1-10

Material Sciences: 1-10

Nanomachines: 1-5

Orbital Mechanics: 1-5

Quantum Mechanics: 1-5

Artificial Intelligence: 1-5

Artificial Intelligence Shackling: 1-10

Blackboxing: 1-10

Robotics: 1-5

Ruggedization: 1-5

Molecular Assembly: 1-5

Safeguards: 1-5

Failsafes: 1-5

Genetics: 1-10

Astrobotany: 1-4

Medicine: 1-3

Social Engineering: 1-5

Public Speaking: 1&2
Speed-Reading: 1&2
Teaching: 1&2
Critical Thinking: 1&2
Logistics: 1-5
Strategy: 1-5
Public Relations: 1-5
Corporate Espionage: 1&2
Automation: 1-5

Business Management: 1-3
Economics: 1-3

Aperture Science Technologies: 1-10
Ghost in the Shell: Cybernetics 1-3
Sword Art Online: FullDive Simulator I-3 (New)

Chapter 16:

Putting aside the memes that were constantly being shared, I actually hadn't had much to do with designing or building the new ships. At this point, it had become a joke to accuse or credit me with essentially everything the government did or planned. Thankfully, for my sanity at least, that wasn't true. Mostly, at least. The Ministry of Transportation had taken the lead on the whole affair, assisted in a great deal of the design and implementation process by the Ministry of State. There'd been some consultation of the Ministry of Economics, but they'd largely stayed out of the whole affair, being preoccupied with a new push for diversified occupations working jointly with the Ministries of Education and Entertainment & Culture.

The ships that resulted from this effort were only designed to do one thing.

They were meant to transport *people* safely and quickly throughout the solar system.

Even if it had taken longer than I'd wanted it to, the proliferation of my printers meant that transporting any sort of cargo other than the printers themselves or *extremely* specialized equipment just wasn't necessary. Moreover, the machines could actually negate a great deal of storage capacity for food, water, and other necessities during the journeys they made. Most of those could be produced simply by cycling waste back into the printers, after all, even if people actively tried to avoid being reminded of that fact of life.

“Honestly, it doesn't actually matter if you're recycling waste in one step or twenty,” I griped irritably under my breath.

“Something wrong, Minister Lopez?” Matthew Bertrand asked, looking over at me.

“Nothing specific, Captain, just griping to myself. You know how government is,” I waved him off.

“I know enough. I'd rather avoid learning more,” he quipped slyly and I chuckled.

“True, true.” My eyes scanned over the readings of the vessel. “You run a tight ship. Everything seems to be running smoothly.”

The man nodded, surreptitiously pulling at his white navy jumpsuit, the garment doubling as an emergency space suit in the event of a hull breach. “I should hope so, the shakedown cruise to Mars and back gave us a good idea of what to expect from the new girls. Even with all of the next-generation technology under the hood, they're surprisingly cooperative. The *Sgt. Pepper* barely had any problems.”

“I heard about the trouble with the capacitors for the EM shielding,” I replied, making idle conversation as I looked around the spacious and well-appointed command facility. “You have my apologies for that, for what it's worth. If I'd gone over the specifications they were using more closely I might have caught the feedback problem.”

The Captain waved my apology off. “It's not a problem, Minister. We had redundancies built in for exactly that reason, and the ability to create replacement parts on-demand really sped up the repair process. Given that no one was seriously injured past a few light radiation burns that were easily treated, there's no cause for further concern.” He paused, looking over the massive displays that substitute for actual windows. “Though, if you don't mind a few questions?”

“If I have the answers, sure,” I replied, leaning back in one of my specially-created chairs.

“I was curious about the placement of the command module,” Captain Bertrand gestured to the room we occupied. “Not to complain, but on the old ships we always put this stuff at the bow rather than deep amidships. I was wondering about the reasoning.”

“That was one of the few considerations I asked to be made, actually,” I stated contemplatively, thinking back to the few design meetings I'd attended. “I argued that putting the command module in the front or using a classical naval design elevating the space above the center of the vessel would open up possible... vulnerabilities.”

The Captain's dark eyebrows rose as his blue eyes sharpened. “Vulnerabilities such as... asteroid strikes?”

I hummed at the leading question and shrugged. “Those were a consideration, yes. Overall, it was judged that survivability of the craft in *any* emergency situation was increased by placing the life support, reactor, and command staff in the armored heart of the vessel rather than in an exterior-facing compartment.”

“I see,” the Captain nodded slowly, his brown face set in a serious expression. “Should we expect any 'emergency situations' anytime soon?”

Not if I have anything to say about it.

“Given my close working relationship with the Minister of Intelligence, I can unequivocally state there's nothing of that type on the horizon currently.” I spoke firmly, my volume slightly raised for the benefit of the staff and officers who were listening in. Catching a few relaxed shoulders, I smiled back at the Captain. “The Prime Minister just believes in an... abundance of caution, given the turmoil on Earth.”

Matthew nodded. "I suppose I can understand that. You know, I was one of the 2ICs who attended that emergency conference call you arranged, way back in the day. After the bombs fell."

I looked over the man's face and nodded slowly. "I think I remember that, now that you mention it. You asked the question about... restocking fuel supplies and life support scrubbers."

He grinned. "You've got a mind as sharp as they all say, Minister. Yeah... I can understand an *abundance of caution*."

I nodded solemnly as well. "Did you want to know anything else?"

Matthew opened his mouth, stopped, closed it again, and frowned. "There's no polite way to ask this, I suppose, but... about the name? Not that I'm *complaining*, but..."

I chuckled. "Ah... well, there was actually a lot of argument over the entire affair. We had a block of people arguing for names of famous historical individuals, geographical landmarks, cities that had... well, cities from before the war..." I trailed off awkwardly for a moment. "There was a lot of debate, especially since this would be our first class of domestically-produced ships that didn't rely on Earth-based design firms and corporate think-tanks."

"...but using a Beatles album?" The Captain pressed.

I snorted and shrugged. "Roughly ninety-percent of the group discussing the new naming convention were Beatles fans, myself included. I can't actually remember how the topic came up, but using album titles from the previous centuries was deemed both inoffensive and could incorporate a lot of cultures fairly easily. Although, I actually voted for *Let it Be* or *Abbey Road*."

We both fell silent, an amused smile on my lips while he bore a somewhat bemused one. On the screens, images of the *Lucy in the Sky with Diamonds*, the *Getting Better*, and the *Fixing a Hole* were displayed, showing the *Sgt. Pepper's* sister ships in formation with itself."

I still contend that the best name for a ship class using Beatles songs would have been Across the Universe.

...

Mars.

I was on *Mars*. I was stepping foot on *the red planet!*

A part of me, some long-forgotten childish bit of me who had always wanted to be an astronaut when I grew up, was squealing and bouncing in abject glee as I rode the shuttle down through the planet's thin atmosphere. It had taken only two weeks to arrive in Martian orbit with the new fusion torches driving the *Sgt. Pepper*, but the ship itself wasn't really meant for atmospheric insertion. We just weren't at the stage where something that big could come and go into planetary gravity wells with any level of ease.

Which meant I got to take a next-generation trans-atmospheric plane down to Eos Chasma, the largest human settlement on Mars.

“We'll be experiencing a little turbulence, but the fixation system will take care of most of it, Minister, so the ride should be pretty smooth overall.”

I nodded at the woman behind the controls, Sasha strapped in to my side looking a bit more nervous. “Thank you, pilot. Get us down in one piece and I promise I won't complain about anything else.”

She chuckled. “Don't worry, sir, our shakedown cruise included off-boarding and onboarding procedures. I've done this dozens of times without incident and we've already gotten three all-clear notices for the weather. We're green across the board.”

I fingered the emergency portal projector tied to a simplified AI with override permissions hidden in my wrist-mounted computer. It was *very* reassuring. “I'll take your word for it.”

As I spoke, I looked out at the viewscreen on my left, the surface of the red planet coming into clear view as we passed from orbit into the planet's atmosphere. The desert landscape of a formerly-alien world filled my view, a desert that was so ancient that it had finished oxidizing, finished *rusting* before the first ancestor hominid had begun walking upright. The ghosts of rivers sprawled across the land, waterways that had dried up before any human had spoken their first word, let alone looked to the stars and thought of worlds beyond our own.

It was amazing.

Finally, in that inhospitable wasteland, a series of clear domes came into view, clustered around one huge one and connected like a web with opaque-covered railways. The settlement predated my design choices for expanding Armstrong City, being much like the original Lunar colony in that most of it existed on the surface. Even before the Stellar Council's decision to massively expand underground, though, the colonists had done quite a bit of excavation for hydroponics farms and extra living space. It didn't hurt that the compacted soil was a great EM blocker in lieu of an ozone layer. Even with all of that in the back of my mind, though, what I could see of the city was incredibly impressive considering what all had to go into building it.

Eos Chasma. Humanity's first colony on another planet.

“That's right tower, we're coming in right on target. I'm reading the runway as clear, please confirm,” our pilot spoke into her headpiece. Then nodded. “No problems to speak of, but nice to see you got the other two landing strips finished. You want me on Old Reliable, right?”

Another few moments and we were looking down the long stretch of a white-and-green covered runway, the colors having been chosen to stand out against the ruddy Martian soil and the dark shadows the sand dunes could cast when the mood took them. The plane made a quick braking maneuver and computer-assisted guidance directed us precisely on-target as we bounced slightly before slowly rolling to a stop.

“Oh thank god,” Sasha whispered beside me, relaxing into her seat.

“If you would, please wait to move about the cabin until the plane comes to a complete stop,” the pilot asked, her voice taking a teasing lilt before growing serious. “We'll be parking at one of the covered terminals so you won't get much use out of those suits you're wearing.”

“That's fine,” I replied. “I'll take an official walk outside later. Sadly, I'll no doubt have a great deal of people who want to talk official business with me.”

“If the traffic I'm hearing over the air is anything to go by, Governor Cheng himself will be waiting to greet you,” she replied.

I nodded. “That is the plan.”

It took a relatively short amount of time before we had rolled into the covered bay for the shuttle, the doors sealing behind us as the pressure readings began to slowly climb up to Earth's sea-level normal. Once the temperature had hit a slightly-chilly, if acceptable range, I heard the telltale hiss as an airlock cracked open. Giving myself a once-over, I turned to Sasha, “How do I look?”

“Like a politician in a space suit,” she quipped instantly.

“Ow,” I replied, one hand over my heart. “Hurtful.”

She snorted and rolled her eyes. “You look fine. Let's go.”

Walking down the extended ramp, I caught sight of a number of flashes in the reception area as a small, but no doubt extra-vicious, press corps stood to greet us. A wall of clear polymer-glass lit up as I raised a hand to wave at the assembled Martian colonists, a genuine smile on my face as I saw an actual paper-banner. The relic from days gone by was being proudly held aloft by two people proclaiming...

'Welcome Minister Ezekiel Lopez!'

Then the sound cut on and the previously quiet hanger was filled with the cheers of dozens of people as I jogged towards the airlock just now opening. First out was a man who would have been called middle-aged during my first life, who happily extended his own hand to meet mine as we shook vigorously amid even more flashes of light.

“Governor Cheng!” I called over the raucous din. “It's a pleasure to finally meet you without the light-speed lag!”

The man chuckled, the sound almost lost but seeming every bit honest from the former biologist. “Same to you, Minister Lopez! Welcome to our little corner of the solar system! I hope you have a wonderful stay here in Eos Chasma!”

“I absolutely plan to,” I replied, our mutual handshake finally releasing. “We'll have to talk about the skyhook project I saw coming in on the *Sgt. Pepper*. It's amazing how much progress you've made in just a year.”

“I look forward to a few conversations, albeit with some experts to help me articulate things. I'm not as gifted as you are when it comes to hardware.” He laughed again, then waved to the crowd around us, a few security personnel in uniforms keeping something like a cordon. “But for now, questions from the public!”

A roar of queries and demands rose up, echoing in the vast chamber as we managed the press conference. A thought came to mind as I pointed to a young man. “You, sir! Have the honor of asking the first question to a visiting dignitary of humanity's first species-wide human government of the solar system. Prepared to make history?”

The young man, even younger than me, gaped like a fish for a moment, his eyes wide before he cleared his throat. “I, uh... m-my readers want to know if you're actually the reincarnation of Stephen Hawking here to save us all from the apocalypse?”

There was silence.

I opened my mouth, closed it, then shook my head. “Excellent question. Usually people want to know if I'm the reincarnation of Nikola Tesla, so this is a nice change. The answer is still, 'no,' though. Next question!”

Moving past that aneurysm-inducing display of humanity, someone raised their hand and I pointed at them. “Minister Lopez, when will the Stellar Council clear commuter traffic between the various colonies across the system?”

“Very topical! Part of the reason for my visit is actually to announce the opening of trade lanes between Mars and Luna-” I explained to my eager listeners, answering the first of many questions to come.

Chapter 17:

It's hard to imagine being on another planet becoming routine and boring when one had been confined to their homeworld for most of two lifetimes. Sadly, living on the moon for so long had inured me to a certain amount of the strange grandeur of foreign worlds. That isn't to say that Mars wasn't *amazing* in its own right, it just... well, after the first week on the planet, I managed to stop staring out at the red sand dunes and rocky crags of the badlands surrounding the Eos Chasma like a total tourist.

Honestly, that wasn't the only reason I was staring.

“Even as well as I can simulate it, a real horizon line is different, huh?” I mumbled to myself thoughtfully.

“Minister?”

Turning, I shook my head at Tom Hughes, a young man who'd been assigned my guide and liaison for the duration of my stay on the red planet. “Don't worry about it. Just a passing thought. I've been trying to accurately simulate things like weather and the day-night cycle, but there's a few things I've been missing. Apparently a properly-emulated horizon line is one of them. Tricky little devil.”

“Ah, I've been down to some of the catacombs they've been digging out,” Tom replied with a nod. “Didn't know it was you doing all that work.”

“Me and a few dozen other people,” I waved him off with a sigh. “What's on the schedule for today, Tom?”

“It's a pretty sparse day, Minister Lopez. There's a tour of local businesses, a meeting with an exploration group trying to get off the ground, and then a few photo-ops with local citizens.” As he spoke, Tom tapped away at the pad in his hand, no doubt shifting through a brightly-colored checklist or time-coded schedule.

Some things never change, after all.

I don't know what it was about that thought, about the sudden ache deep in my soul that I felt, but it brought my current melancholy into sharp focus. The trip to Mars had been interesting, the arrival fun and entertaining. Both had lifted my mood in ways sitting around dealing with problems back in Armstrong City just didn't.

“I'm going to retire.” I stated suddenly, my tone one of realization rather than declaration.

“Sir?” Tom asked, his brown eyes widening.

I chuckled and waved him off. “Not now, Tom. Don't panic. Just... soon. In... a few years. I moved to the moon to get away from politics and do my own thing for once, not end up setting up an entirely new circus with new monkeys to give me new headaches.”

“Oh,” Tom replied quietly, sweeping a hand through his black hair nervously. “I... ah, I'm sorry to hear that sir, if I'm honest. You're... well, amazing. Everybody I know says it, even the people who don't like you think you do a bang-up job.”

I leaned back in my seat and returned to staring out the window of my apartment into the distant horizon of Mars. “Thanks. Watching the news, you'd think everybody wants me out of a job for amassing too much power. It's nice to hear there are people who like what I do.”

Tom scoffed. “With respect, Minister? They're assholes who can only say what they say because they aren't dying from radiation poisoning or musculo-skeletal disorders from lack of meds. They just don't want to think about that because tearing people down gets more views than building them up.”

I startled myself by laughing so hard I started a coughing fit. “Hah! Good God, but I needed that. Thanks, Tom. You're a saint. I mean it. Fuck... it's been a while since I laughed that hard...”

If anything, though, that just cements my decision further.

It was a sobering realization, that I really hated my job.

“So... are you still going to be inventing, Minister Lopez?” Tom asked, then hurried to amend his question. “I know some of those assholes like to say it's not *really* you, but... like, fifteen or twenty people working for you and not getting any credit, but I always thought it really *was* you and everything.”

“There are other people who help do some nitty-gritty stuff,” I admitted. “Things like safety testing, filing permits, medical applications, and I've been repeatedly told that my sense of aesthetic design is horrible, but most of the nuts and bolts are my work. Well, the work of a bunch of AI that I programmed and used for designs and builds.”

“When you say 'AI' do you mean *actual* artificial intelligence or virtual intelligence?” Tom pushed, his eyes gleaming with curiosity. For a moment, I had a flash of paranoia and wondered if he was

digging for information, but I rationalized that away. I'd had the man's entire life put through a microscope so detailed I'd been able to observe quantum tunneling.

Well, no. Not really, but the point was that I wasn't about to repeat the same mistake I'd made with Rhodey.

"I'd forgotten that term was coming into vogue," I replied with a chuckle, the delineation between the two intelligent systems sparking old memories of a game from a lifetime ago. "Virtual, for the record. You've probably heard me say that my programs are *intelligent* without being *intelligences*."

"The difference being that the latter is a person while the former can only pretend very hard to be one," Tom nodded eagerly. "I've heard that before, I just didn't know if you actually confirmed that they were virtual or not."

I wagged a hand back and forth. "There's still some discussion on exactly what the difference is *mechanically*. I don't think I've seen a proper paper put forward detailing it."

"I'm actually working on something-" Which I had Seth pull and scan. "-and I was wondering if you'd look it over and maybe give me a few notes."

"Send it to Sasha and I'll try to make some time before we leave next week," I replied easily. Knowing what I did, it was pretty good work, though the moment still made me feel as though I were a director accepting the offer of a cafe waiter to look over his screenplay. Mostly to make conversation, I asked, "Is that why you got picked to follow me around for two weeks? Background in science and technology?"

He nodded, a bit sheepishly. "Pretty much, sir. I'm actually a bit *persona non grata* in the field at the moment, so it's hard to get anyone to do some editing."

I blinked, reviewing what I'd seen in his file. "Oh, why so?"

Tom stilled, his smile turning plastic. "I... ah, don't think it would be appropriate to say, sir?"

I folded my arms and looked the man over. "Okay, now you've got me *really* curious."

Had I missed something?

The other man grimaced and looked at his tablet. "We really should get going, Minister, if we don't want to be late."

I sat firm while the man rose from his seat. "I believe you said my schedule was sparse today?"

Tom grimaced again and looked away, his face hot. "Look, sir, I really don't think I'm comfortable discussing this."

"Will you at least assure me it wasn't *illegal*?" I asked intently.

"Not... *technically*..." Tom sighed and ran a hand through his hair. "Ugh. Alright, fine. I guess... you are a political figure and a really great guy with everything you've done. It would be a shame if you got caught up in a scandal because of me." He pulled out a personal smartphone, setting his data slate on the table as he did so before passing it to me. "Here."

[I looked the picture over and instantly recognized it.](#)

The 'girl' depicted was around four and a half feet with bright blue eyes, medium-length brown hair wearing a t-shirt and a pair of cut-off blue jeans at the upper thigh. I didn't think anyone called them 'Daisy Dukes' anymore, given the original show was a century and a half old, but the aesthetic choice had never really faded from the public consciousness.

All in all, 'she' could have been your average, if exceptionally pretty, early bloomer twelve year old or somewhat petite fourteen year old. Her skin was flawless, her features perfectly symmetrical, there were no apparent defects or wounds across any of her ten fingers or ten toes, and she seemed happy and cheerful in the picture being taken.

Except, 'she' was an 'it.' A purely mechanical and digital creation mimicking the human form without any possibility of a sense of self developing.

As Tom had quoted me, it was just a program pretending to be a person.

Because attached to the photo was a schematic and coding docket for her physical and digital bodies. Given that I'd already seen all of this in my dive through the man's history, I already knew what it was, even.

“Is there a *reason* you're showing me pictures of your sex toy?” I asked idly, looking back to the other man and sliding his phone across the table.

Tom flushed even deeper. “Ah... I, had one of my co-workers over. Well, not *coworkers* really, but we're doing work in the same field and he wanted to talk about a few things over dinner and I offered to cook. Or, well, have Mary cook. I built her so that she could do household chores in addition to... *well*, you know.”

“The word you're looking for is 'sex,’” I replied, not unkindly. “Go on, though.”

“Anyway, Guiseppe figured out what she was pretty quick and excused himself from the conversation. I found out he told pretty much everyone who works on high-end coding and VI development here on Mars about it... we're not exactly a huge pool of people, you know? Only about a thousand, and that's stretching it to include the hobbyists and people with overlapping or convergent specialties.” He ran a hand through his hair again, anxiously. “I'll understand if you want to ask for someone else to take care of your schedule for the rest of your visit, Minister Lopez.”

“Pfft,” I scoffed, rolling my eyes. “That's pretty fucked up.” The man winced and shrank in on himself. “No, dammit, not your gynoid. That's good civ. Not the look I would have gone for, but good civ. That dude you invited over, that's fucked up. It's like someone accidentally finding your chest of BDSM gear and then spreading it all over the net when it's none of their business. It'd be one thing if he just straight up told you he was uncomfortable and left, but that was a real dick move on his part.”

“...you mean, it doesn't bother you?” Tom asked hesitantly.

I shrugged. “It's not like you had a *real* twelve year old tied up in your basement or something and I'd have something to say if you wanted me to *watch you* do the deed, but as long as you keep anything kinky behind closed doors it's frankly none of my business.”

Tom sagged with relief and choked off a wet noise, to which I pulled out a handkerchief and obligingly looked away as he blew his nose, pondering the red sands of Mars once again as he composed himself.

When I looked back a few moments later, his eyes were red and he was still sniffing. “Th-thanks, Minister Lopez. I, um... it's been hard. Once it got out and everything.”

I reached over and patted him on the shoulder. “It's no big deal, dude. Some people just aren't ready to handle stuff like that.”

He snorted and tried to hand back the cloth, to which I waved him off. I had a pocket printer just for small objects like that anyway and germs were gross. “Thanks, though. It means a lot to me. I put a lot of work into Mary after my last relationship crashed and burned. She, ah... couldn't keep it going after the Short War and... I just felt like everything was closing in on me without someone to talk to. It was really awful because we were even to the point of talking about marriage and kids, but then she just broke everything off. Mary got me through a really tough time and some bad headspace.”

There'd been glimmers of that in the report. Possibly not suicidal tendencies, but definitely some circumstantial evidence of self-harm. I even had him marked in my systems to report the behaviors if they reappeared again, though after 'Mary' had come into the picture his patterns had improved substantially.

An idea bubbled up as I listened to him release his pent up frustration. “With Mary's help I was even getting to the point where I was thinking about having a kid. Maybe use one of those cloning pods and have Mary able to help me. But now... everyone already treats me like a pariah. If I went through with it I just know they'd try to take any kid away because I'm a perv.” He looked up at me pleadingly. “I'd never touch a *real* kid. Mary's just a gynoid! I don't know why they can't see that!”

I reached up to rub my chin. “Honestly? I think after this latest round of ostracization, I think you should probably seek professional therapy for a bit before you consider moving forward with plans for children. Even if you have Mary as a secondary caregiver, you'd be the primary one and the only one with true sentience. As such, it would be incredibly important for you to be in a firmly positive mental state to deal with the challenges you'll be facing.”

I sighed and leaned back as the man contemplated my words. “Honestly, I probably would have built something like 'Mary,' but my schedule's been so packed I'm not sure when I'd have the time to do it.” I paused and slumped. “God, I hate my job.”

It felt good to say it.

After the Last Dogs are settled, I'll retire. A bit longer to make sure everything is settled, five years maximum, then I'm out. I hate this job, it sucks, and I want to start having fun with my life.

I blinked, then grinned. “Hey, I've recently had a spot come open for a best friend. You ever think about moving to Armstrong, Tom?”

The man blinked, then smiled. “I, ah... are you sure? I mean, people will talk. With the rumors about me here on Mars it won't take long before they reach the Moon.”

I scoffed again. “Hah, fuck 'em. What's the worst they could do? Demand my resignation? I should be so lucky.”

Tom swallowed convulsively, seemingly at a loss for words. “Y-yeah... I think I'd like that. If it's okay?”

“I wouldn't have offered if I wasn't sure,” I replied, reaching over for a handshake, which he gladly exchanged. “Now, c'mon, let's go tell Sasha. If I let my press agent get blindsided by this, she will *absolutely* space me.”

Skill List:

Mathematics: 1-10
Computer Programming: 1-10
Physics: 1-10
Material Sciences: 1-10
Nanomachines: 1-5
Orbital Mechanics: 1-5
Quantum Mechanics: 1-5
Artificial Intelligence: 1-5
Artificial Intelligence Shackling: 1-10
Blackboxing: 1-10
Robotics: 1-5
Ruggedization: 1-5
Molecular Assembly: 1-5
Safeguards: 1-5
Failsafes: 1-5

Genetics: 1-10
Astrobotany: 1-4
Medicine: 1-3

Social Engineering: 1-5
Public Speaking: 1&2
Speed-Reading: 1&2
Teaching: 1&2
Critical Thinking: 1&2
Logistics: 1-5
Strategy: 1-5
Public Relations: 1-5
Corporate Espionage: 1&2
Automation: 1-5

Business Management: 1-3
Economics: 1-3

Aperture Science Technologies: 1-10
Sword Art Online: FullDive Simulator I-3 (New)
Ghost in the Shell: Cybernetics 1-3 (**4 New**)

Chapter 18:

One thing Mars had that Luna didn't?

Gravity.

Or, at least, enough gravity to make *some* things safer than they would be in lunar gravity. The difference between one-sixth and one-third 'standard' gravity was significant, after all. As such, one had to be extremely careful of thrust vectors and how much power you put into them. Luna's atmosphere, or lack thereof, was also problematic. While Mars' atmosphere wasn't anything to write home about, it still *existed*. On a purely technical level, you could say that Luna had an atmosphere as well, it was just so thin as to be nonexistent for almost all intents and purposes.

Which meant, if you were flying around on Luna and you 'crashed,' you had two choices. The first was almost always a collision with the Lunar surface that would be hard to avoid and extremely lethal to all but the most robust of systems. The second option was to fire your thruster as hard as you could and make for open space, then light up a rescue beacon and hope you didn't collide with anything up there. This result was much, much more survivable, but still terrifying and unpleasant for everyone involved.

Where I'm going with this is that you couldn't *casually* fly anything around Luna. Being licensed to operate craft around Armstrong, especially, was the work of a highly qualified and highly trained group of elite individuals trusted with what were essentially piloted ballistic missiles around a heavily populated urban area. And that was just the *above-ground dome city*.

Flying around in the new suburbs (and I hated that pun) I'd carved out of the bedrock?

Haha, No.

Not just 'No,' but *Fuck No*.

I hadn't mapped out an entire public transit system that could adequately service every part of the massive underground city just so that some asshole with a drinking problem or an anger management problem or a *human condition* problem could have a bad day and kill dozens or hundreds of people by ramming their fancy flying car into a building at a hundred kilometers an hour.

So, yes, I'd had to yield to the whiny rich entitled assholes who wanted *private* public transport pods that only they could use since they couldn't have nice cars to lord over everyone else, but the alternative was so much worse that I still considered it a win. And, yes, I hypocritically enjoyed those very same private pods as a perk of my office, but the point stood. Besides, the general public could access them by actually paying extra credits instead of just taking the free public ones, so it wasn't like there was *that much* mystique or unfairness built into the system.

The closest Luna ever came to cars, flying or otherwise, was a legion of glorified golf carts with inductive wheels that drew power from the paths they drove on. I'd styled a few for EVA work as fifth-generation lunar rovers, as well, but they were still slow, lumbering, and careful vehicles. Because even making something that couldn't leave the ground didn't mean all that much in one-sixth G. I mean, imagine the Duke brothers pulling their iconic daredevil jump and ending up flying a hundred meters into

the sky before crashing down on someone's roof.

Or an outdoor eatery.

I'd gotten a certain sick satisfaction in animating that scenario out for the people who just *would not shut up* about *fucking cars*.

On Mars, though?

You can have cars.

One-third standard gravity takes some getting used to in terms of driving and the motors have to be specially-designed to handle the thin atmosphere and Martian dust, but you can drive around without worrying about hitting the throttle too hard and flying a dozen meters in the air when you hit a particularly bad bump.

“Holy Shit this is *so much fun!*”

My cries only made Sasha clutch at her armrests harder as I gunned the motor harder and faster down the ancient riverbed that, all things considered, made for an excellent racing track. Turning the last lap, I resolved to look into releasing the next generation of hover-tech soon, if only to kick the Martian racing circuit up a notch. Not quite into the suicidal realm of pod racing, but even as fun as this was, turning things up to eleven was easy enough.

Taking my foot off the accelerator, I allowed the vehicle to begin coasting to cut its speed to the point where I wouldn't take a shot at breaking our necks from whiplash by stopping too suddenly. Seeing the isolated dome at the far end of the straightaway, I pulled onto a paved off-ramp and glided to the point that I could apply the brakes smoothly before tapping the gas to edge us into one of the enclosed garage spaces.

“Well,” I grinned, looking over at Sasha, “I had a good time. You?”

Her stilted breathing and rictus of fear slowly relaxed to allow her to turn her head and glare at me. Into the silence of the moment came the rushing of atmosphere as the garage outside sealed around the car, nozzles of air spraying the red dust off and drawing it into a filter that would be dumped back outside.

“I am *never* letting you drive anything with me in it *ever again*,” Sasha vowed firmly.

A quiet chime let us know that the cycle was done and we got out as I shook my head chuckling. “No one likes a party pooper, Sasha.”

“Who are you and what have you done with my boss?” She replied, steadying herself as she took a look at the racer and shivered. “He's supposed to be this serious workaholic that barely knows what fun is. Maybe you've seen him?”

“Ouch,” I hissed playfully. “True, but still... ouch.”

I stretched a bit, luxuriating in my back cracking as I looked the racer over. It was *entirely* over-engineered and would have barely been able to beat your average tank back on Earth. Here, though, *everything* weighed one third, which meant it was actually advised to make vehicles like this *heavier*

rather than as light as possible. Someone, in a fit of wisdom that made me want to subsidize them, had used that opportunity to stuff the entire thing with safety features and armor it up to the point you could be reasonably certain of only minor injuries from a head-on collision at even the highest of speeds.

An airlock to our side opened, a man in a pressure suit sans helmet walking in with a grin on his olive face. “So, how'd it go, Minister? Drives like a dream, right?”

I reached out and shook his hand. “You're an artist and a wizard, Marco. Don't let anyone tell you differently.”

Taking the opportunity, I mentally transferred a stash of credits to him, making the man frown as he looked at his wrist-mounted mini-tablet. “Minister Lopez, I couldn't possibly! This is, this is just far too much!”

I waved him off. “Consider it a gift if you won't take it as payment. From one engineer to another. I really appreciate people going out on their own and doing stuff like this. Setting up the first extraterrestrial racing business? *That's* some serious style.”

Marco hesitated, then sighed and nodded. “You are too kind, Minister. Too kind. Still, I am glad you enjoyed it. Business is steady, but nothing to write home about. I hope, now that we have ships again, Eos Chasma might see some tourists?”

The leading question made me laugh as I nodded. “Like I said in the interview, in the next year or two we're going to see some movement on that front. We're still hammering all the bugs out, but the Council might even get it done before then if we're lucky.”

“Glad to hear it,” Marco nodded, then hesitated. “Not that I do not enjoy the familiarity, but it is good to see new faces outside of vid-mail, yes?”

“Don't I know it,” I nodded sympathetically, then made to leave.

“Ah-” Marco spoke up and I turned to look at him while Sasha finished picking up our bags and turned back as well. “-there are reporters, I should warn you. They have been camping in the lobby since shortly after you left for your ride.”

I sighed and checked my internal clock. “Yeah, right... they've probably released the news by now. Ugh, this isn't going to be pleasant.”

Sasha grimaced and nodded. “It's what you signed up for with this tour, though.”

I nodded and made to leave again, when Marco spoke up, his expression timid and fearful while still maintaining something of an impotent anger. “I-is it true? I mean, the... the Dogs? Are they...”

“Still out there, yes.” I nodded gravely. “I know it sounds like a boilerplate answer, but we really are doing everything in our power to hunt them down. I won't tell you not to worry, but they won't get off another attack like they did. We know about them now, we're not going to be caught unawares.”

The man sighed deeply and nodded. “Very good, Minister. If you want to meet them head-on, then?”

I looked to Sasha, who met my gaze and nodded, then turned back to Marco. “Once more into the breach, dear friends.”

The man seemed to regain a bit of his humor at that, and smiled. “Just this way, then.”

He didn't *need* to show us, since this was the same way we'd come out, but I didn't fight him. A pair of our security agents were standing at the exit of the hallway, each looking suitably imposing in low-profile ballistic suits over their pressure suits. Even with their visors set to transparency, they still looked like they meant business.

Once the small crowd of two-dozen saw me, noise immediately flooded the room as various people began speaking all at once. The two security staff stepped up to shield Sasha and myself even as I held my hands up high for silence. Even as I waved them down, the anxiety and near-panic on their faces was obvious.

“Minister Lopez, can you confirm-”

“What's happening on Earth?!”

“Was the UNAS complicit in-”

“How long as have you known about-”

“Is Luna declaring war on the UNAS?”

“QUIET DOWN!” I bellowed, the microphone on my suit picking up my voice and projecting it through the small speakers in the lobby's entertainment system. “I will give a short statement and then answer questions *ONE AT A TIME*. I know you have just received alarming news from the Stellar Council's headquarters in Armstrong City on Luna, but I would ask for your patience and understanding while I give you the answers you need.”

Uneasy silence, but silence nonetheless.

I cleared my throat. “Okay, first off. Yes, I knew our intelligence services had discovered the presence of Last Dogs operatives still active on Earth. I rendered aid to Minister Samson who chairs the Intelligence division of the government. He and I have been working closely to cultivate resources that would aid in ferreting out agents of Earth-based governments working on Luna, Mars, and the other settlements in the Sol System. We discovered evidence that the Last Dogs may not have been wiped out two months ago and, after confirming what we could, presented it to the Prime Minister for further examination and a decision on how to move forward.”

As I took a breath, someone seized on the pause to shout, “Don't you think you should have told us sooner!?”

Raising my hands to forestall another wave of noise, I shook my head. “As great as the need for transparency in government institutions is, there was a need for a period to examine the data and make plans on how to disseminate it *without causing panic*. If the government, *your government*, had clumsily handed down alarmist announcements without an accompanying plan, it only would have exacerbated the situation.”

More than a few among the crowd scowled and grumbled. I took the opportunity to push forward. “In anticipation of your next questions, *yes there is a plan*. I have to go light on the details because of informational security, but the Stellar Council has made connections with trustworthy figures on Earth who will aid us in carrying out further investigation and removal of any Last Dogs agents found to still be operating. We do not plan on letting any of them get away free after being complicit in the Short War.”

Mouths opened, but I raised my hands again. “Further, Minister Samson has, with help from many other ministries, confirmed that there are no Last Dogs cells on any celestial body in the Sol System save for Earth. Again, this announcement is to keep you informed and aware of government operations, *not to cause panic*. Humanity has seen, time and time again, what harm rampant paranoia can do to a society. The Stellar Council has also enacted plans to harden defenses around Luna and ensure no vector for digital attack is left open to sabotage any vital systems. We will be rolling out plans to add shelters and air-gapped life support as well as other safety systems to all existing colonies. In addition, we will also be expanding a web of tracking satellites over any human settlement to ensure nothing like the attack on Luna during the Short War can reoccur.”

Many of the gathered people now looked calmer, more rational.

“Now, it has been confirmed that there is a great deal of Last Dogs activity in the UNAS and, as such, the Stellar Council has decided to *temporarily* suspend efforts to clean up the debris field in orbit around the planet. With no assistance on our part, that will ensure no current craft will realistically be able to make orbit for another ten years and provide us with a more than effective quarantine of any potential terrorists who might try to infiltrate the colonies. Data channels have also been locked down to prevent viral attacks and the suborning of personnel as a short-term measure. We will be instituting new safeguards there soon as well, but they're a bit dry and tedious to explain without a power-point.”

A few awkward chuckles, which was good.

“Now, that's the initial stuff out of the way. I'll admit I had wanted to do this in a more structured briefing, but I lost track of time taking one of these fine vehicles out for a spin today.” No, I actually hadn't. I'd engineered things to make the affair more casual and less scripted, playing to my reputation as one of the more informal members of the Ministries. “So, I'll open the floor to questions now and, if we run long, I can schedule something before we leave for Venus tomorrow at the airport to do a final run through anything you can think up overnight.”

I clapped my hands. “Now, please, in an orderly and reasonable fashion, raise your hands and I'll call on you.”

We ended up running for three hours, unfortunately. I did manage to steer the conversation on a tangent a few times to discuss various Martian eateries I'd had the pleasure of going to during my stay, as well as the art gallery that had apparently just popped up. Too much red for my taste, but it was nice seeing culture grow up here on the red planet. Maybe I could arrange to transport a few pieces to a showing on Luna before I left?

At any rate, I kept answering things until the reporters had finally gotten enough of a fill that we all filed back into the buses we'd arrived in, then took back off towards Eos Chasma. Thankfully, I'd managed to use the trip out here to drop off one of my contingency plans without anyone the wiser.

“Next stop, Venus,” I sighed in relief, hoping the travel time would at least allow everyone there to cool off a bit.

Chapter 19:

I'd specifically volunteered for the solar system grand tour for a number of reasons.

First and foremost was simply that I was going a little stir-crazy, even with access to the new immersive full-dive tech I'd developed. Back on Earth I'd fallen into my pre-reincarnation habits of living almost like a hermit in my cocoon of high technology and extreme luxury, but even then I occasionally needed to get out and do *something*. Work had helped quite a bit in that regard, taking my mind off my slowly building cabin fever, but eventually I'd reached the breaking point and seized on the then-theoretical solar system tour to do a bit of traveling.

The other reasons?

“The Council has moved ahead with the release of the new Methuselah and Panacea Treatments,” Sasha stated as she looked up from her tablet. “They're being called the medical breakthroughs of the millennium.”

“Aww, I feel all warm and fuzzy,” I chuckled, leaning back in my chair. “That should nicely distract everyone from the Last Dogs.”

Sasha frowned at me. “I know this is the plan, Zeke, but... is this really okay? No one's going to know it was you.”

“And, in exchange, the Council gets a few pretty feathers in its cap that I am very visibly absent from,” I replied with an easy smile. “We've been over this, Sasha. I *want* them to take credit. The institutions I've built need the win, because the wins will give them legitimacy. If I announce them as *my* developments, people will start wondering why they need *everyone else* in the government if I can just fix everything.”

Sasha sighed. “I understand your reasoning, Zeke, but... that was *before* you impulsively decided to retire after this is all over and I *know* I used to be one of your biggest critics, but the Stellar Council just doesn't have anyone as capable as you are. What are they going to do when they come across a problem that they can't actually fix because you aren't in the government anymore?”

“Probably ask me discreetly for help after trying everything else, which is what most governments tend to do.” Sasha sent me a flat look. “Well okay, not *me personally*, governments hate looking incompetent when compared to specialists that know what they are doing. So unless those people are already in-house, they're always a last resort.”

“I thought you hated introducing inefficiencies into systems,” Sasha replied tartly.

“*My* systems, yes,” I riposted pointedly. “The Stellar Council's systems? They run on politics, which is inefficient *by design* because it relies on *humans* to create and follow through on arbitrary decision-making paradigms.”

“Ezekiel, you're just reinforcing my point,” Sasha sighed, shaking her head. “The Stellar Council *needs you*. Humanity needs you.”

“They need my tech,” I refuted tiredly. “I'll find someone who can cut through the bullshit, hand them a personal A-ah, *VI* that will feed them on the job training, and they'll be something like competent in the next year or two.”

“They'll be competent,” Sasha repeated with a nod, “but they won't be *you*, Ezekiel. You're more than that. You're an actual genius. A real miracle-worker.”

I nodded, looking out over the Venutian stratosphere. Regardless of the comparative hellscape on the surface below, the floating city of Venera located some fifty kilometers upwards and held aloft by super-tough air bladders was positively paradisiac. The sun was a bit too bright, the clouds were off-color, and you still had to wear a breathing mask if you were going outside, but the pressure was near-enough Earth's that you could forgo a full suit and there was nothing toxic in this altitude band.

“Most people would say that *this* is a miracle, Sasha,” I replied eventually, waving my hand out to the curving and twisting streets of mankind's first Venutian city. Contrary to the cultural exports of Earth-like architecture on Luna and the Martian colony being overtaken by *Futurism* of all things, Venus had drifted towards an organic design that incorporated cutting-edge hyper fabrics that tied sections of the city together.

The overall feel was something like an alien woodland replete with twisting groves of trees and hanging mosses linking each reaching structure.

Sasha opened her mouth to refute me, but took another look through the tinted windows. The one unavoidable downside to living here was the increased amount of solar radiation you picked up. The buildings and most sections of the city incorporated tinting to their glass in addition to a kind of electromagnetic-resistant tiling that I'd created back in my early days for use on outdoor surfaces in desert areas, then redesigned for roadways.

Simply put, it was a kind of meta-material that acted like a solar cell, but ate more broad-spectrum waves than they could.

Regardless, the Venutian population, which was only a few hundred people (though growing quickly), was already reporting a significantly higher incidence of skin cancer. The medicated cream they used stopped much of it, but I would see about a more permanent fix for anyone who liked the idea before my retirement.

“It is a miracle,” Sasha conceded.

“One I had barely any involvement in,” I nodded.

“That doesn't mean you can't keep doing great things for humanity as a whole, Ezekiel,” Sasha shook her head.

“Me 'retiring' doesn't mean I won't,” I riposted.

She grimaced, “but you won't receive any credit for it. You'll be doing things more like you did here, with life-extension tech and a cure-all drug... just, letting someone else say it was their work.”

“Honesty was always a hot-button with you,” I stated airily, my eyes tracking outwards to the clouds once again.

Hmm... I wonder...

“The world could always use more honesty,” Sasha replied firmly, her gaze following mine. “I just... don't like the precedent it sets, Zeke. What you've helped humanity achieve in the years since the Short War, it's amazing, but there are always people who want to backslide us into corporate interest groups, oligarchies, and corruption. That's why I was so against you before we met, you know?”

I nodded. “I got that, yeah. It's a criticism I get from a lot of people, Sasha. A lot of people who don't know me, at that, but that's a deal you make when you become a public figure. As much as working in the background might be a slippery slope, using my authority to quiet dissent is much more of one, and it's something I could see myself doing if I have to keep bearing this mantle.”

I took a deep breath and reached down to the open cooler between us, picking up something slightly sweet and fizzy. It was a Venutian special, actually, a type of drink that partially-sublimated into mist once you opened it, allowing you to breathe and smell it as much as imbibe it as a liquid. The specific brands were named after cloud formations, even.

So fucking cool.

I breathed in mist from cherry-cumulonimbus before tipping the glass to my mouth, enjoying the unique mixture of sensations. “There are people who legitimately don't care about media attention, people who can let it roll off their back like water off a duck's and I sometimes envy them, because I'm *not* one of them.” I looked her in the eye. “I like to pretend, but I actually do care about what people think of me and I don't enjoy being treated like a suspect power-monger by anyone with a problem with authority. I don't *like* living a public life. I just... once this mess with the Last Dogs is solved, I'll keep an eye on things, but I'm retiring.”

Sasha grimaced, leaning down and pulling out her own drink before taking a deep pull from it. “I really can't say anything to convince you otherwise?”

I shrugged. “You probably can, eventually. Keep at it for a few months and you might convince me of the necessity of retaining my public authority, but... do you want to?”

Sasha's dark eyes locked with mine, realization setting in. “You really meant it when you said you hated this job, didn't you?”

I nodded. “I did. It's an aggravation. Too much talking to people, too much wasted time, too many bruised egos to soothe, too many cats to herd. I did say politics was inherently inefficient, didn't I?”

She nodded, her face a mask of curiosity as to where I was going with this.

I flexed and stretched, getting myself comfortable again as I leaned further back and took another pull from my drink. “If I took all the time I'd used to pull people together after the Short War and had, instead, used it to advance humanity further? The absolute minimum would have been a fully orbital ring

complete with artificial habitats for the remainder of our species.”

Sasha stared at me. “I-I'd have to run the numbers, but...”

“Oh, it's entirely feasible,” I replied with a dark chuckle. “Considering that humanity's population would be in the hundreds of millions instead of the low billions? You'd be surprised at how little space that number of people would take up.”

Realization set in as she digested what I'd said.

She knew me better than to call bullshit, too. When I made a claim like that, I meant it. I had tables and footage, and all sorts of documentation. Satellite photography, drone flyovers with thermal sensors, stolen intelligence from various regimes... I'd *poured* time, energy, and resources into saving as many people as I could.

“I feel like you're making my point for me again,” Sasha stated with a sigh. “You can't just say you're responsible for the human population still being three billion and expect me to shrug it off like it's nothing.”

“My point being that I do my best, most important, work outside of the public eye,” I replied. “And I like it like that. I know that oversight is important and I would remain answerable to the good of humanity as a whole, but playing political games and assuaging people who think they have power... if I keep doing this, it only really ends one way.”

Sasha grimaced, looking away. “You'd be taking over.”

I nodded, sighing again. “I'd be the First Emperor of Sol. All would love me and despair.”

Despite the seriousness of the moment, that at least got a chuckle. “You're right. You've always been an all-or-nothing kind of person and I've seen the frustration building over the months I've been working for you. I just thought it was a normal kind of thing, nothing *serious*...”

“I built the institutions I did because I firmly believed, believe even now, in the fundamental right of self-governance. That doesn't change the fact that desperate times sometimes call for unpopular policies, but several times during the worst protests against the cloning technology I was sorely tempted to just crack down on dissent. We *need* more people to maintain our technological base, if nothing else and no one wants to face that ugly truth. Even when the technology is more like iron wombs than true cloning. Even when what comes out is an infant child instead of a fully-grown adult that's been implanted with speech and skills and programmed to do whatever I say.”

Neither of us spoke of it, but we both knew that was something entirely in my power to accomplish.

“I want to help humanity reach its full potential, but having me in a public position of power is just reinforcing the impulse to control rather than guide.” I looked back at the clouds. “I would be a good tyrant, you know? Stern, but kind. Iron-handed, but just. I would make *wonders* for us, Sasha. Truly amazing things that most people could never dream of... but, in that world, it would be me shoving it down people's throats, forcing them to take what I give them or be frozen out of any technological advancement and reduced to little more than a pre-industrial agrarian.”

Sasha hummed, a distant look in her eyes. “You'd have terraformed Venus, wouldn't you? I remember seeing the plans in your database.”

I shrugged. “It'd be more efficient. Sky cities are neat and all, but remaking the world into a body fully capable of supporting human life would increase the carrying capacity of the planet by an order of magnitude. Mars, too. For the first time in nearly a billion years, the Sol System would have three glittering blue-green gems circling our star, each capable of hosting a population in the billions.”

“But you'd have to force the people living here to leave,” she observed, tapping the hammock-style chair she was sitting in for emphasis. Another quirk of the local culture, probably tying back to decades prior when people worked hours on end suspended beneath structures. Now, most 'chairs' were dangling stretches of cloth that were affixed to the ceiling with magnetic clamps.

“The people on Mars, too.” After a moment's thought, I continued. “While I was at it, I'd have to fix Earth and Luna. Pull everyone off it, probably put them in stasis while I rebuilt the ecosystem, revived extinct species, restored cultural sites, built new cities that didn't require all the messy upkeep and toxic waste...”

“Part of me wants to tell you to do it,” Sasha admitted candidly. “I believe you could, and... it really would be amazing. A world free from want, from need...”

“A world where everyone is the same, where the uniqueness is stripped away and people are granted bread and circuses to keep them blind to the gilded cages they live in,” I smiled, the expression melancholic.

“This is the reason you picked up Tom Hughes on Mars, isn't it?” Sasha asked suddenly, perking up from the dreamlike state of contemplation she'd fallen into.

I chuckled, the gesture making the chair I was in swing slightly, inviting me to stretch the high-tech fabric and pull it into something I could lay down in. “Caught that, did you? Yeah, Tom is... he's a step ahead of things. He's started to decouple traditional morality from the modern applications of advanced technology, and I want to encourage that.”

“Encourage, not force.” Sasha hummed thoughtfully again. “I can't say it doesn't rub me the wrong way, having a-a *sex toy* like that. Like a little girl.”

“Like, but not *actually*,” I pointed out, giving in to the urge to shift the 'chair' to a hammock and lie down. “The ultimate arbiter of legality, in my opinion, should be harm. The man made a sex toy that makes people uncomfortable. The same could be said of blow-up dolls from a century prior. As long as he doesn't expect me to watch him *use it*, I couldn't care less what he does with it behind closed doors.”

“I see the logic, the same with the cloning, and having fourteen year olds vote” Sasha granted, “but I also see why people would object to it. Beyond even the grounds for misuse, there are questions of morals and ethics that-”

“-that can't, or at least *shouldn't*, be decided by one person,” I interjected with a nod, folding my hands back above my head. “There are people who would greet more revolutionary change with open arms, but they're in the minority. Humans are very much still the great apes that climbed down from the trees. We like the comfortable, we enjoy novelty, we tolerate incremental change. Every now and then, we enjoy a little bit of awe and wonder, but not too much.”

“What do you think happens when we get too much?” Sasha asked.

“We start to get scared. Things change too rapidly, the firmament we built our lives on starts to shift. We worry that we'll become outdated ourselves. It's a frightening thing, and I can't blame people for having those feelings.” I yawned widely. “But I can blame them for how they respond. The people they ostracize for being different, for liking things that are strange even if they don't harm anyone. The symbols they pervert, the homes they burn down, the bodies they create...”

“So your solution is to remain an incrementalist. To slow things down and feed humanity small changes. Changes that they'll willingly accept instead of forcing them to adopt them immediately,” Sasha murmured.

“I do as much as I can outside of that. I feed the hungry, house the homeless, clothe the naked. Oftentimes I do those things against the wishes of many powerful people.” I chuckled sleepily. “People who think they have power, at least. I'll give them a longer lifespan to properly consider the questions my technology poses, cure them of illnesses so they can live to see the wonders I'll eventually show them. I'll spare them as much hardship as I can... but I can't do that if I'm tied down by the power-hungry, the deluded, and the greedy.”

“I think I understand,” Sasha sighed, my ears picking up the swaying of her chair as she set it into motion. “Who do you think you'll pick to take over when you're gone?”

“Hmm...” I yawned and didn't answer for a long moment, my consciousness falling away. “Why, want the job?”

There was a surprised squawk in response, but I was already asleep.

I dreamed of skyships flying through alien skies.

Skill List:

Mathematics: 1-10

Computer Programming: 1-10

Physics: 1-10

Material Sciences: 1-10

Nanomachines: 1-5

Orbital Mechanics: 1-5

Quantum Mechanics: 1-5

Artificial Intelligence: 1-5

Artificial Intelligence Shackling: 1-10

Blackboxing: 1-10

Robotics: 1-5

Ruggedization: 1-5

Molecular Assembly: 1-5

Safeguards: 1-5

Failsafes: 1-5

Genetics: 1-10

Astrobotany: 1-4

Medicine: 1-3

Social Engineering: 1-5
Public Speaking: 1&2
Speed-Reading: 1&2
Teaching: 1&2
Critical Thinking: 1&2
Logistics: 1-5
Strategy: 1-5
Public Relations: 1-5
Corporate Espionage: 1&2
Automation: 1-5

Business Management: 1-3
Economics: 1-3

Sword Art Online: FullDive Simulator I-3

Aperture Science Technologies: 1-10
Ghost in the Shell: Cybernetics 1-4

Gundam: Iron-Blooded Orphans 1&2 (New)

Chapter 20:

I was forced from slumber by a sudden rush of neurochemicals that sent my consciousness from a perfect standstill to a hundred kilometers per hour in a single instant. Snapping vertical, I blinked in shock for a moment before accessing my HUD and beginning to look through notifications for what could have possibly triggered the highest-tier alert that I'd-

Ah.

It's time, then.

“Khonsu, crack me a portal to Luna,” I ordered, rising from my bed as the virtual intelligence engaged and opened a blue-rimmed gateway from the *Sgt. Pepper* to my home on Earth's moon. I stepped through, crossing several hundred million kilometers of distance and more in a single step and making my way to my primary control apparatus. Just before the portal snapped shut, I toggled my private quarters to seal, adding a 'do not disturb' digital note onto the system. Even if it was discovered that I'd left the ship, though, I'd make explanations later.

This was more important.

Taking a deep breath, I slid into my seat and allowed the interface to slide into the newly-revealed socket in the back of my neck in turn.

My world exploded in a riot of color, the cyberbrain interface dramatically widening the available bandwidth and heightening the speed of my processing power.

While I'd been reluctant to truly change anything about my brain itself, for obvious reasons, I'd long-since acknowledged the need for a certain level of cybernetic enhancement. I'd have worried about possible complications from the surgeries and the lack of human test subjects, but I'd installed *much* more invasive augmentations and replacements in the Last Dogs agents I'd been surreptitiously capturing during the past several months and was monitoring them closely enough to have substantial forewarning of any health problems that could arise.

Additionally, a slowly-growing minority of the space-based population was volunteering for more open trials of the technology.

It wasn't as if I could actually showcase my in-depth and very unethical medical experimentation on earthbound humans. I ostensibly had no way to retrieve or return to Earth after kidnapping them.

That kind of thing would raise more questions and cause more problems than it would answer or solve either.

Regardless of the advances the society I helped create had made in safety and security, there were any number of accidents over the past few years. While traumatic brain injuries were comparatively rare, damage to neurological tissue as a result of exposure to toxic chemicals or oxygen deprivation from insufficient ventilation still occurred from time to time. In the event that regenerative treatments either failed or weren't successful enough to restore those affected, a few cybernetic augmentations had also been handed out to those individuals as well.

That was putting aside those who suffered from workplace and domestic accidents that resulted in amputation, too. They were rare and becoming rarer every year, but they still occurred from time to time and some people opted for a mechanical replacement instead of having a vat-grown clone limb installed.

It was still rare for someone to be as augmented as I was at this point. The neural lace I'd had Heka, my medical VI, install was not, strictly speaking, an alteration to my brain so much as it was an *addition* to it.

Specifically, it opened up a new world to me.

The world of a true digital existence.

My meat-brain was limited. I didn't dare truly alter it in any substantive way lest I lose the ability to pull technology out of my ass, but the combination of a neural lace and cyberbrain interface allowed my thoughts to expand into an advanced digital space which buffered and transitioned the pure biology of 'me' into the pure electronics of the budding Stellar Neo-Net which was being constructed to support inter-colony communications across the solar system.

Clusters of data and streams of information molded themselves into sensory data I could understand as I began picking out and putting together exactly what I needed.

I caught myself up on the latest efforts of my various artifi-well, *virtual* intelligences, as they were being called now. The cadre of intelligent programs which lacked a sense of self, but were more than capable of micro and macro-scale management of the various crises which still cycled through the reduced human population.

'Mongolia.'

Submerged as I was in the digital sea, it took a different kind of effort to physically verbalize words in the material world than it did to simply 'talk to myself' here in the digital one.

Orbs of light appeared next to me, each one with different constellations of code, color, and intensity orbiting them. Pulses of raw information made themselves available to me in ways I wasn't ever quite sure how to properly communicate to another human should I ever be asked. I imagined such a task would face the same difficulty as describing color to the blind man or song to the deaf.

It was a new type of sensory input that, although it *overlapped* with existing senses in a kind of fever-dream synesthesia, there were aspects of it that stood alone and unique. The best analogy I had come up with was to compare the experience to how food had taste, texture, and smell. Although the fusion of all three was an integral combination to eating, each was still their own sense independently as well.

In turn, what I experienced in that moment was as if someone combined proprioception, abstract conceptual understanding, and sight.

I did not so much read or consume the knowledge presented to me by Montu, Set, and Seshat so much as the act of observing it made it become part of what I knew. My intelligences governing warfare, subterfuge, and archival knowledge presented a unified agreement and judgment on the final location of the Last Dog's leader out of the ninety-ninth percentile with the possibility of an error out to one ten-thousandth of one percent.

'More than acceptable to act on.'

I projected intent, an act that combined parts of speaking and writing. The decision-order I pronounced did not so much leave me to travel into the digital ether as the data packet followed a coded course as it duplicated itself from my own existence.

A fraction of a moment later, Khonsu and Ptah transitioned into view. Or, at least, part of them started interacting with me as they reacted to my orders. More data was exchanged with an absent-minded order sent to Anubis and Isis to call up a select few of my fellow Ministers.

In the minutes I knew it would take them to respond, I started directing my various programs to sort through all of the possible solutions for the Bad Guy. While they were doing that, I reallocated more power to the new servers that had just come online on Earth and started crunching the Last Dogs final ciphers from their newly-suborned upper-level operatives.

Now that I'd *finally* gotten a breather, it didn't matter how uncrackable or perfect this asshat's codes were. My latest generation of servers had just come online, a transformational leap from my old capabilities just a few months ago in capacity, speed, and throughput. Once I'd understood that I was fighting a concerted effort to undo my work, I'd begun to construct something capable of squashing whoever it was like a bug. Once I'd understood exactly who it was I was up against, I'd increased the production speed by triple.

The result had cost tens of thousands of Earth-bound lives while I'd been otherwise occupied, but in a completely amoral cost-benefit evaluation, it was worth it. Especially given I now hoped I could prevent another catastrophe like the Short War from happening.

I had *arbitrary* amounts of computing power to throw at them now.

'Oh.'

I stared for a few microseconds, the equivalent of minutes as the now-decoded files.

'Fuuuuuuuuck.'

My avatar flexed in a way that could be interpreted as inhaling deeply, the action a carry-over from my biological processes as I released a long string of virulent curses.

My moment of emotional overreaction over, I cued up another VI, Seb, and set him to work in concert with Montu and Seth. Unlike the latter two, Seb wasn't a 'general purpose' program I'd created to deploy out into the wild. Seb was more like the first VI I'd created, back on Earth, before the term had even gained prominence. Isis was a 'personal' program, specifically one that would manage my own private dwelling, the defense thereof, and my personal server farms.

That was, Isis had been charged with the *physical* defenses. She controlled the electronic locks, the cameras, the emergency defense turrets, blast doors, panic room, life support, and all manner of other appliances and conveniences.

Seb, on the other hand, was my personal VI I'd optimized for cyberwarfare and cybersecurity. I'd named him after the ancient Egyptian god charged with the role of defending the power of the pharaonic kings. While Montu and Seth both had digital capabilities to complement their designs of physical warfare and information-gathering, neither was purpose-built to do what Seb did.

'Reset Permissions. Global Maximum. Confirmation Code: J0\|\|Ey-A99le533f)!.'

Seb exploded in a corona of data and began linking with the exterior-facing systems. Truthfully, I'd only created the program as a final line of defense after realizing the technological expertise in the enemy camp. My own systems were designed with a kind of paranoia I had only ever dreamed was possible prior to the apocalypse.

After nearly being taken out by a nuclear strike *on the goddamn moon*, I had gone a bit overboard. Or, well, recent revelation proved that false, but at the time...

All of my systems were air-gapped, just as a start. I'd looked up some designs on what was left of the Old Web and installed analog *mechanical* interlocks between separate computers, creating data air locks of sorts. That allowed separate levels of analysis on independent servers for proper security and hygiene. 'Proper' in that a copy of a bleeding-edge cybersecurity and warfare VI with access to a repository of the entirety of human knowledge on a quantum computer was in level, decrypting and decoding each segment of data and purging it of anything hazardous.

'...but was it enough? How long had they been doing it? When did they start this?'

My systems dinged with a safety alert, indicating that my remaining organic parts were producing adrenaline and attempting to raise my heart rate and blood pressure to dangerous levels. I okayed a suggestion from Heka to inject the mildest form of sedative to calm myself down. It wouldn't affect the neural lace, but giving myself a stroke might. At least I didn't have to worry about the artificial hearts...

Seb's scan started turning up flags, red indicators across every major city on Earth. There were some in space, too, but thankfully far fewer.

'I was too late. He spread the code itself across his various lieutenants. I've been kidnapping them almost weekly! Each one had memorized the relevant part and then fucking destroyed their memory! Goddamn apocalypse cult!'

That was the real problem. Even in tracking down the leader, I'd also had to piece together their network encryption to get through the last level of security. The leader, or *leaders* I suppose, would have the entire thing, able to access the full program suite that was tucked away in a location even *I* hadn't been able to find. More than likely, it was being ferried about between low-ranking agents who had no idea of what they were actually holding and bracketed with fakes and duplicates that would be constantly exchanged like some kind of maddening back-alley cup game.

'Thirty-Thirty-three-Thirty-five-'

My artificial hearts dropped into my stomach as the number kept climbing and more intrusions were detected.

'I'd known they were planning something, but I thought it was going to be sabotage or subversion of electronic systems. Possibly damaging what communication infrastructure is left... Maybe using deep-fakes to start civil unrest or start taking things over, but this...'

Half of the Stellar Council's icons lit up.

It was a testament to how fast I was working in this space that I was able to cancel the alerts I'd sent out before the slower peripheral systems were able to communicate them to the council members I'd planned to coordinate with.

They were among the ones infected.

I sighed as Seb finished analyzing the systems I'd set him to.

I was clean. Every single interaction with every single system in my radius came up clean.

'It takes a hell of a mind to come up with something like this. It's foul beyond words, but whoever is living in that tiny camp in Mongolia must truly believe the Last Dogs' rhetoric if they're pursuing this strategy. Cognito-hazards implanted in graphic designs, media, and music... I never thought my workaholic tendencies and nostalgia addiction would save my life.'

It was a memetic contagion that spread from digital media and interconnected systems into the human mind, living rent-free in the back of your thoughts until...

You just snapped, went crazy, and started trying to kill everyone around you and destroy everything you could.

When would it happen?

That depended on which specific factors you'd been exposed to, in which order, and whether or not you ever stopped being exposed to them. With how much the Old Net and congruent surveillance systems had been damaged, if not outright destroyed... I could simulate the elaborate formulas to determine what order people would go insane, but there would be a significant margin of error even with my new capacities.

I stared at the blood-red *fifty-seven percent*.

My digital avatar turned from Seb's report and ordered a tungsten rod the size of a diesel train engine car to be dropped on the location of the Last Dog's leader.

'I'm beyond sure he's there. Satellite imaging during one of the Dogs' reporting periods confirmed it. There could be more than one of them in that little camp, but that's where the leader or leaders are. I own their network now, too. There can be no doubt.'

Were there innocents in the blast radius? Almost certainly. Would someone notice and raise a stink? I could pass it off as space debris. There were doubtless other problems which would come about as a result of dropping a rod from god, but honestly...

'Level the entire place. Enough innocents have already died and more are going to. This will be just a drop in the bucket.'