

## One

*Of course* the customer pickup counter stood at the back of the myfab.com store, thought Clay. If asked, the manager would rationalize the location as being close to the store's complex metabolism of miniaturized laser sinterers, desktop extruders, and biopolymer fermentation vats, but in his imagination, Clay could hear Nil snort: the counter at the back forced the customer to pass in-store displays, which were memes' coat proteins, designed to infect the minds of passersby.

The aisles meandered past the displays. Ceiling-mounted bullet lights glossed the surfaces of mock living rooms, where black leather couches rested on spindly carbon nanotube frames across from gigapixel video displays painted on false walls. A string quartet played from the interior speakers of a Lorelei sedan; the autocar's wide-open doors revealed a wraparound cabin of hidden electronics and vat-grown leather and tropical hardwood. Citrus and musk scents drowned out pheromones and neurotransmitter receptor agonists by the perfume counter. A head-and-torso robot mounted on the counter turned its blank mannequin face and lifted its arms as Clay approached. "Sir, could I interest you in a cologne?" came a synthetic voice from a speaker hidden between the mannequin's chin and nose. "We can combine masculine pheromones and oxytocin derivatives to rekindle that romantic spark."

Clay hesitated a step, then turned away, his cheeks warming and his heart rate speeding. How could the thing know? Brain activity scanners were getting smaller, but they weren't yet cheap enough for myfab to fill its stores with them, were they? He exhaled and kept walking. The store's computers saw a man with a child nearby and a glinting band on his left ring finger, rapidly cooling in the air conditioning. The store's software had guessed he and Jenny could use a romantic spark, nothing more.

His heart rate slowing to normal, Clay looked around and

wondered why the displayed plenitude bothered him. Since he and Nil had sold their company a few years earlier, money had been no real concern—he could splurge on impulse purchases, like a double-neck electric bass or an indoor wood-smoker compatible with the SueChef 8800 in his kitchen, without blinking at the cost. Yet Clay had never been impulsive; his D4 receptor activity was low enough that deferring gratification came naturally to him.

*Martin, on the other hand...* “Kitty!” cried Clay’s son, and he stomped to a robot pet display. A robot cat tensed its legs and its ears twitched, but then it relaxed under Martin’s awkward petting and rubbed the corner of its mouth against his hand. A lifelike piece of work: a calico, white belly and orange eyepatch, like Jenny’s old cat that had finally died a couple of years earlier. *How many times had he told her not to empty the litterbox when she was pregnant? Hadn’t she heard of toxoplasmosis?*

Martin looked up at him and the vapidity of his expression soured Clay’s stomach. “Wan,” Martin said.

“Not today,” Clay said.

“Iwan.”

“No, Martin.” Clay stepped closer to the boy.

The boy cringed, his expression half angry and half ready to cry. Clay’s hand clenched and he stepped closer. Martin’s eyes grew wide and fearful and the robot cat scampered a few steps away. Clay relaxed his shoulders and inhaled. “We have another toy for you at the back of the store. Let’s go.”

Martin looked at the robot cat and sniffled. He limply put his hand in Clay’s and stumbled after his father.

This trip was another of Jenny’s brilliant ideas. The toy waiting for them was a plush robot monkey with the ability to sing and emit scents. Somehow the combination of music and aromatherapy would cajole Martin’s neurons to form more robust synapses; so said the theory she’d read on some powder-blue website full of emoticons and schmaltzy photos. *You should be happy, she’d said, the on-board volatile molecule fabricator is one of your MuSynths. And Martin needs to be more integrated into our daily lives, so take him with you to pick it up.* She was grasping at straws with her hopes of healing Martin. Didn’t she know that?

“Da.” Martin’s voice sounded timid. He wrapped his free arm around Clay’s leg.

Clay shook his head and sighed. “It’s okay. Just a picture.”

They’d reached an America United licensed products display. An animation as large as a home theater monitor, painted in viscous oil and hydrophobic fluorophores, dominating the display. It cycled from an eagle, its wings as broad as the Mall’s length, rising like a phoenix to the Washington, D.C. Firestorm and back. Words resolved and dissolved above the flames, *Never forget* and *June 19, 2019*.

“Do’ lie.”

Clay didn’t like it either. Almost four years gone, and though the country had recovered it still felt brittle. “You don’t have to look.” He let go Martin’s hand and cradled the boy’s head between his palm and his thigh. He led Martin forward, past the painting, past a case where America Freedom Force action figures battled terrorists (ecowarriors, right-wing Bible thumpers, and Uighurstani nuclear scientists), past wearable computers (mostly wristwatches and necklace pendants) branded with the America United logo, past a life-size bust of President Everton, brown hair edged with gray, eyes firm but caring, face cast in an expression of implacable strength. \$1995—that had been a good chunk of money when he was a kid, four months of payments on his dad’s diesel pickup; now closer to one.

Did he smell something? Clay’s breathing grew deeper, slower. He glanced around the statuette for volatile molecule fabricators and blinked in surprise when he saw it. A MuSynth, a black disc the size of a man’s thumbtip, had been pinned to the bust’s lapel like a microphone. A cylinder the size of a pencil’s crimp band jutted out, the optional MuFan attachment. The fan motor was too quiet to be heard over the background noises of distant conversations and treading feet. A serotonin emitter, designed to instill calm.

But clunky compared to the NuGlands the Defense Department had just ordered.

He glanced away with a guilty start. He had a professional interest in volatile molecule fabricators, that was all, but it would be easier if he didn’t have to explain himself to passersby. “We’re

almost to your toy,” he said to Martin, and walked on.

Two more displays. The next one they came to had another robot mannequin behind a dark wooden bar bearing wine bottles and glasses. A banner across the front of the bar read *myfab.com Oenologix—your perfect wine at your perfect price*. Jenny drank too much wine, not him. He strode on—

The mannequin spoke. “You could use a glass of wine, Clay Schieffer.”

Clay swung his head around, the calming effect of the serotonin emitters now banished. “How do you know my name? And who are you to call me by it?”

Like the one at the perfume counter, the mannequin’s face was the color of nickel and smooth as a doorknob, a bulge for its nose, indentations for its eyes. It spread its arms, palms out. “Don’t blame myfab. They don’t know I’ve borrowed their machine.”

Clay squinted. A marketing ploy by myfab? Or a cracker’s phishing expedition? “You haven’t answered my questions.”

“True. Pardon me if I don’t answer your second one, but I can answer your first. I know quite a bit about you, Clay. I know in late 2019 you and Anil Thomas sold TS Microcatalytix to Titan Industries for \$123.6 million. Have you ever wondered why?”

His mouth hung open. How many people knew that number? Other than him, Nil, their attorney, their CPAs... not even Jenny knew with that much precision—

Clay squeezed shut his eyes, shook his head once to clear it. The person waldoing this mannequin had hacked his CPA’s server or played golf with a Titan Industries exec to get that information. What was he trying to do with it? “No, tell me why,” he said as a challenge.

“Do you know what they did with the MuSynths?” the robot asked. It cocked its head, and spoke next with its voice changed. “Sir, do you prefer red or white?”

Clay stole a glance. A couple walked his way. They appeared to be in their 50s, but with all the antiagathic treatments on the market these days it was hard to tell. The woman had dark roots, puffy blonde hair, and makeup that artfully disguised sagging jowls and wrinkles at her mouth. She ignored Clay and talked loudly about

fabric swatches to her husband. At the lapel of his denim blazer, the man wore an America United pin—a platinum eagle with splayed wings and a diamond for its eye against an outline of the continental U.S, with individual states in ruby, jade, emerald, and gold. Platinum members were the highest rank, Nil had said. With blue eyes set deep in his combover head the AU man scowled up at Clay. Clay tugged at Martin’s arm and stepped closer to the bar.

“Sir, perhaps a pinot grigio?” the mannequin asked again, as the AU couple strode past. Clay nodded, distracted, and he started when he heard wine pour into stemware. The glass’ base tapped the bar and he returned his attention to the mannequin and its distant master. The wine was yellow-white and condensation dewed on the goblet. He swallowed a dry, fruity mouthful and pictured Jenny shaking her head at his boorish unwillingness to savor the wine’s bouquet.

He set down the glass and stared at the mannequin. “What about the MuSynths? Tell me.”

“You wouldn’t believe me if I did. It’s better if you find out yourself.”

“How the hell am I supposed to do that?”

“You still work there. You’re smart enough to get into Titan’s server farm in St. Louis,” the company’s headquarters.

Clay’s face grew clammy. This was a trap. The National Counterterrorism Service was testing him before finalizing the new DoD order, 600,000 NuGlands. “I should call the feds on you.”

The robot shrugged. The play of the overhead lights on its face tinged its appearance with sadness. “I can’t stop you if you do. It won’t harm me, though. I’ve been careful, they won’t find me.” It lifted its chin. “But Clay, I don’t think you’re going to do that.”

Who was this stranger to claim to know him so well? Clay swirled his glass on the bar and light danced in the wine. “You don’t?”

“A hunch. Feel free to send me an email. 1001001@samizdat.zj.” Clay’s eyebrows rose. The Republic of Zhejiang was a haven for Filipino smugglers, Russian hackers, Bahraini offshore bankers, and native Chinese IP pirates: the Cuba of the Far East. “Got it?”

One million one thousand one. Clay nodded and looked up from his wine. The person running the mannequin had dropped the

connection. It stared stupidly at him and the half-empty glass.

“Da, toy,” said Martin.

*Ding* sounded in his earbud. “You’re scheduled to meet Nil at your house in five minutes,” said the concierge software running on his wearable computer in its bland alto voice.

Clay glanced at the watchface of his wearable on his right wrist. *Dammit*. They met every Monday night to take stock of things happening around the business, a tradition going back to TS Microcatalytix’ early days in a cramped, rented warehouse. Normally not so early, though. He’d be at least fifteen minutes late. How could he forget?

“Da!” Martin clutched awkwardly at his pants leg and pulled.

One million one thousand one.

Nil stood on Clay’s guest parking spot while his Lorelei sedan thudded its door shut. The evening air clinged to him, heralding the coming sauna of Gulf Coast summer. Below the setting sun’s orange light shining on Clay’s red tile roof and through the upper branches of the live oaks, the house and the front yard lay in the last shadow of daytime, colors still vibrant and outlines still clear but without glare or glint. Knee-high robots, metallic pygmy centaurs, trotted across the st. augustine lawn with toys in their arms and laid them in neat piles near a swing set and jungle gym done in thick plastic and primary colors. Nil took a breath. Despite Martin’s problems, Clay had a haven to return to after business hours.

Nil shook his head and frowned at the thought. He’d seen enough of other people’s marriages to know it was no picnic. With antioxidant cocktail therapy, he would be vigorous and erect at age eighty; with his favored position at the head of the line for Agerix, he would be so at eight hundred. Time enough to settle down later. Still, before going to the front entrance, he touched his overear microphone to activate it and told his concierge to revise his supplement regimen to boost his mood.

The holographic doorman appeared in its wall niche to the right of the doors. “Mr. Thomas, I’m afraid Mr. Schieffer is not home at the moment. Mrs. Schieffer asked me to show you in.”

Nil frowned. Whatever Clay's faults, he was usually punctual. And though he got along with Jenny—she was a fine looking woman, not a trace of baby weight, and whip-smart—a perpetual awkwardness hovered over them. She didn't approve his girlfriend-of-the-month lifestyle and his implicit rebuke of Clay for marrying, he guessed. No matter. He could charm anyone, couldn't he? He nodded to the doorman and the double doors swung open.

Clay's house was smaller than Nil's, but not by much. From the foyer one could look straight through enfiladed rooms to the granite-countered kitchen and the breakfast room beyond. Nil walked to the left, where the living room lay behind a walled off stairwell.

Casement windows and a French door ran along the right-hand wall and gave a view of the back deck, a lawn strewn with more toys, and a fenced-off swimming pool. The living room extended forty feet back to twin doorways, one to the media room and the other to the billiards room. A low bookcase separated the living room into near and far sitting areas. The near sitting area had a couch, a loveseat, and two chairs arranged in a C-shape around a coffee table, the whole ensemble in burgundy leather and polished walnut.

Jenny sat in one of the chairs, her knees tucked under her chin and a half-empty glass of red wine in her hand. She wore linen shorts and the pale curves of her thigh and calf caught Nil's eye for a moment. A ponytail gathered her black hair. She turned from the view out the casement windows to look at him. "Clay's out with Martin picking up a new edu-toy. He didn't tell me you were meeting here tonight." She extended her left arm. The sleeve of her silk, floral-print blouse fell away from the thin silver wearable at her wrist. She peered at the watchface. "He should've been home by now." Her tone of voice carried a hint of exasperation. *At Clay or at him?* Nil thought.

She remembered her manners. "Care for a seat? Glass of wine?"

"Thanks." He sat in the middle of the couch, just outside her personal space, while she touched her earring microphone and told the house to bring out the bottle and a second glass. The couch faced a fireplace, the bricks now cold until November. Above the mantel a slideshow played a photo of Jenny and a man of Chinese descent—

her brother, he guessed from the resemblance—in an ROTC uniform holding a rolled parchment.

*Time to say something*, he said. “How’s—”

“How’s—” she said at the same time.

Nil bowed his head slightly. “Ladies first.”

Jenny wrinkled her nose and waved away his offer. “You’re the guest.”

A household robot rolled up on rubber treads carrying a bottle and glass on a tray. It set down a tray on the coffee table and poured malbec.

“How is Martin?” Nil asked, a concerned expression on his face. He sniffed his wine but kept his gaze on Jenny.

“He’s making progress, but it’s slow. Two steps forward, one back, you know?” Nil did not, but he nodded anyway. “He wants to learn, he wants to behave properly, I can tell. But it’s tough on him.”

Nil sounded hopeful. “The NuGlands might help.” He sipped his wine. Tart, lingering.

“The what?”

“NuGlands? Clay hasn’t talked about them?”

“Not that I recall.”

Nil cleared his throat to cover his surprise. “You know how the MuSynths work, right? A series of microreactors can be programmed to convert chemical feedstocks to any desired—”

“I took chemistry in college,” she said with a sharp edge. “Sorry, that sounded rude.”

It did, but Nil waved it off. “I forget what people know. The NuGlands are a huge step beyond the previous model. They’re much smaller than the MuSynths, and as you might guess from the name, they’re implantable. We can tag them to have affinity for particular body regions and lodge them on arterial walls. They get power from combusting serum glucose and can make practically any biologically active molecule. They’ll put big pharma out of business.” He’d given that pitch so many times it rolled off his tongue with a practiced air of casual excitement.

She frowned at a spot on the floor a few yards away, her mind apparently gnawing at the new information. “Neurotransmitters and axonal and dendritic growth promoters might help him,” she said.



The words came so easily and so calmly they hinted at long hours reading about brain architecture and crying for her child. “Though they wouldn’t help with problems in the developmental gene expression cascade.” She shut her eyes and swirled her wine, a scab over emotions rubbed raw. “Enough of my problems. How’s—sorry.” She winced. “I don’t mean to sound catty, but I’ve forgotten her name.”

“Minerva,” Nil said, and he acted out the tactic of an apparently heartfelt confession, so ingrained by habit he barely noticed. “I wish I could forget it too.”

The slideshow over the fireplace changed to a photo from the time of their buyout, Jenny, Clay, and Nil at a restaurant, all smiling—even Clay beamed with lively eyes—goblets and steak knives in view. “Sorry.”

“She was flighty and troubled and too young. She pawned off my jewelry drawer and dropped out of college.” He shook his head. A steeper price than he usually paid for a girlfriend-of-the-month. “My own damn fault. You don’t want to hear—”

From the back of the house, behind the kitchen and breakfast room, a garage door rattling open. Jenny’s eyes drooped and her mouth pressed closed and turned down at the corners. Nil had spent twenty-five years since puberty studying women for signs of lacks and clues to how to fill them. Jenny had a huge lack.

She was also his business partner’s wife. He gulped wine.

“Mama!” Martin cried as he ran into the living room. A toy monkey in brown fur held the boy by the shoulders and rode his left upper arm. Clay followed, his steps slow and his expression distant.

“Sorry I’m late,” he said to Nil. He nodded toward the billiard room. “Let’s shoot some eight-ball and have a drink.”

“I’m who moved the schedule forward tonight. There’s an America United meeting I want to attend.”

Clay stopped and glanced at Nil’s chest, where his platinum membership pendant hung on its chain. Clay stiffened and turned his head from Nil’s gaze. “Let’s go,” he said, and pointed to the billiard room.

“Will you have time later to play with Martin?” Jenny asked. “He’ll better integrate the toy into his family schema if you do.”

“It’s Monday,” Clay said sharply. “I meet with Nil every Monday —”

“Clay, I said, later. Can you do that for your son?” *And your wife*, Nil thought.

Clay blew out a breath and his shoulders slumped. “Yeah, sure, whatever.” He strode toward the billiard room. As soon as Nil crossed the roller track threshold to the billiard room Clay told the doors to roll shut.

Clay leaned back against the bar, arms crossed, neat scotch close at hand. Nil leaned over the table, his brown eyes intent on the cue ball while he drew back the stick. “You didn’t read the sales report, did you?” he asked, and shot.

“Smoke and mirrors, isn’t it?” Clay said. “At least you can call engineers on their bullshit.” The cue snicked the six-ball and the six-ball rattled into the side pocket.

Nil met his gaze and Clay crossed his arms tighter, expecting another lecture on how to be a senior manager. “Not this one. DoD is only the tip of the iceberg. Half a dozen federal agencies—NCS, NMHA, some even I’ve never heard of—plus, the biggie. America United ordered six million NuGlands.”

“Six million.”

“No, Clay. Six million! From AU alone! Between our royalties and appreciation in Titan’s share price, that’s twelve, fifteen million dollars for each of us!” Nil eyed and struck his next shot. The five-ball drove home the three.

“Like we need more money.” Clay lifted his glass. Scotch smoldered in his mouth. More money wouldn’t keep Jenny from sniping at him. More money wouldn’t make Martin above-normal, the way the genes they’d added should have made him.

Nil leaned against the table and twirled his cue with his free hand. The platinum eagle fell away from his stout chest and glinted in the green light. “What’s on your mind?”

Clay dropped his gaze from the platinum eagle to his whiskey. “Nothing important.”

Nil chalked up the knuckles of his left hand, the white in high

contrast to his South Indian skin tone. He bent over the table, then glanced up. “Jenny?”

Clay shook his head.

“There are other fish in the sea,” Nil said. His teeth nibbled his lower lip as he struck. The five-ball rattled around the pocket mouth, kicked out. “Damn.”

Nil had made that hint a few times. As if divorcing Jenny would make a difference—golddiggers would cling to Clay like leeches. He reached for his cue and walked to the table. “It’s no worse than usual.” Under the green light lay a clean Newtonian universe of balanced spheres and laser-planed slate: a realm within his sole control. No stranger would move the balls or shake the rails like the bumpers of a pinball table. “Fourteen the corner,” to be followed by the eleven at the far end. The fourteen clinked on Nil’s balls already in the pocket.

“Then what? Martin? Something coming out of R&D?”

Clay bent over his next shot but a sudden notion made him left his head. Had *Nil* sent him the message? He studied the other’s fleshy cheeks and guileless eyes, looking for evidence and not finding any. It made no sense; if Nil had something to tell him he’d say it straight up. Nil peered back and raised an eyebrow. The platinum eagle shifted and caught the light.

What had Titan done? What could AU members not overhear? “I’m feeling pressed, that’s all,” Clay said while trying to keep his voice level. He lined up his shot. The cue ball caught the eleven off-target and pushed it off the rail and away from the pocket.

Nil seemed to accept the answer. “Let’s go to Havana some weekend.” A post-Castro paradise of casinos, topless dancers, new divorcées and college girls on spring break... Clay couldn’t care less, but those things caught Nil’s attention and he shrugged and nodded to push the conversation away from his thoughts. Nil sank his next shot, his next, his next, and the eight stood behind a constellation of striped balls. “Bank the cue, bank the eight,” he said, and pointed the cue stick at the target corner.

“You’re not that good.”

“I’m on a new supplement for fine motor control,” Nil said. The final words sounded half-forgotten when they left his mouth. He

eyed the balls and struck. Thud snick thud, and the eight-ball fell into the corner pocket.

“I’ll be damned in writing.”

“Leave something out there and I’ll take it from you,” Nil said, and then cleared his throat and looked away. “I do need to run. Thanks for the drink—” he lifted his vodka tonic, mostly ice cubes, from the side table and drained it.

Couldn’t Clay trust his best friend to hold any revealed secrets? How firmly was Nil tied to AU? “What’s so special about tonight’s meeting?”

“One of the founders is speaking tonight, and there’s a platinum reception for him and some other bigwigs afterward. Good chance for networking.”

“How much of it do you believe?” Clay asked, then wondered if now were the time to start wasting words. Hurriedly, he said, “I hear from AU a lot of things about President Reynolds that don’t fit with what I remember of those days. And if Reynolds was a bad president, he paid for it on 6:19, right?”

Nil glanced to the side, then leaned toward Clay and lowered his voice. “A lot of AU rhetoric is nonsense,” he said. “Don’t fake that surprised look.”

Caught, Clay shrugged. “If it’s nonsense, why pay it lip service?”

“Joe citizen wants to believe there’s a strong hand on the tiller after 6:19, and the bronze and silver members want to belong to something bigger than themselves.” Nil shrugged. “And like I said, it’s a good chance for networking. Do you want to come? I can’t get you into the reception but you could hear the speech and get some face time—”

“No. Thanks. Martin.”

Nil accepted the excuse as they walked to the front doors. Jenny and the boy were upstairs out of his sight. Good.

The words fit with what he knew of Nil: Clay was glad to see his business partner hadn’t drunk the AU coolade and only participated for pragmatic reasons. But would that make him more likely to help Clay, or less?

## Two

*Thank God* Jenny had been out of the living room when he left Clay's house, Nil thought as his sedan descended the exit ramp nearest the Excelsior Hotel. *Leave something out there and I'll take it from you.* Christ. No kidding there were other fish in the sea, almost all of them not Clay's wife. Nil pushed thoughts of Jenny far out of mind and put on his game face. He'd soon be surrounded by executive members of AU, senior bureaucrats at federal agencies, and a wide range of local business and professional figures. He undid several buttons of his shirt and spritzed a cologne, equal parts oxytocin derivatives and odorants custom-fit to his genotype, onto his neck. He had to make TS Microcatalytix look good. He had to make himself look good.

Had Clay's mood tonight been more distracted than usual? His friend had never been an extrovert around the office, but tonight, Clay had been even deeper in his own head than usual.

Nil bolted upright. Had Clay picked up on his thoughts of seducing Jenny? He relaxed and in amusement sniffed out a breath. If he had to wager on Clay's ability to intuit others' thoughts he'd take the other side every time. Clay hadn't guessed a thing. To assume otherwise was to fall into the common trap, on hearing nothing but the echo chamber of one's own thoughts, of assuming the rest of the world thought those same thoughts too. Nil had long ago decided not to be common. Clay would never realize Nil had noticed Jenny's slender limbs and smooth skin—

Game face. His Lorelei stopped under the Excelsior's smooth stucco porte-cochere and he climbed out amid large black sedans and cars with state and federal government plates. Fifty yards away, an orchestra of traffic hummed, roared, and grumbled on the freeway. Nearby office midrises thrust banks of lighted windows into the washed-out night. Under the porte-cochere, revolving doors gave access to the hotel lobby.

The ballroom looked like any hotel conference space: taupe carpet, beige walls, the divider panels pushed back into their recesses. Umbellous chandeliers tinkled in the breeze from the vents. Murmured conversations filled the room, occasionally punctuated by guffaws and loud greetings. The crowd was a mix of AU members of all levels. Trophy wives hung on the arms of powerful men in handmade suits with gold and platinum membership pins and pendants. They recognized Nil with the barest of nods. Weaker, poorer men wore suits customized by machines and silver and bronze membership pins in need of polish. The latter stared at Nil's platinum eagle and hesitated before speaking to him in high voices. If they brought their wives the women smiled blankly, if at all, and peered enviously at the diamond- and silk-adorned platinum wives. The looks struck him as catty and rude. Jenny would never—

*Other fish in the sea.* Some women attended alone, or in pairs. Many wore guest passes clipped to their lapels and flicked their gazes over the cut of men's suits and the polish of men's shoes. He'd had enough of that attitude from Minerva and didn't care for more. The other solitary women were AU employees in crisp navy suits, skirts swishing as they walked, former sorority girls and black debutantes who crewed the swag and membership tables. He idly fingered the top copy on a stack of President Everton's manifesto, *No Higher Virtue*, and chatted with a tall *kali* with straightened hair and wide green eyes until the lights dimmed for a moment and he took a seat.

The chairs had been arrayed close together in three sections, the two on the wings slanted toward the podium. What at first glance appeared to be microphones hung from the ceiling, but Nil recognized them as MuSynth clusters. Some people carried short glasses of water from the tables in the corners and sweat dampened Nil's back when he relaxed in his chair: warm temperatures enhanced the contagiousness of moods. He swallowed dryly. On either side, silver members brushed against him, muttered apologies, and leaned away.

The podium stood on a dais, the latter trimmed in red-white-and-blue bunting. Behind hung a massive American-flag-themed backdrop with huge glossy portraits posted on it. President Everton's

likeness held the top position directly behind the podium, and in a row below were pictures of Alexander Fisher, AU's executive director and, as CEO of Titan Industries, Nil's ultimate boss; Kiper Carter, retired Marine Corps general and AU's security policy director; AU's domestic policy director, Christopher Bishop; and tonight's speaker, AU's economic policy director, David Grunwald. Grunwald sat toward the back of the dais, next to the head of AU's Houston organization.

The lights dimmed, a spotlight lit the podium, and video displays on the front and side walls showed a closeup. The local director gave an introduction. Grunwald was an emeritus professor at SIU Carbondale "who responded to the extreme challenge of June 19, 2019 by turning thought into action" and helped form AU with other figures from the St. Louis region. Nil doubted Grunwald's role in forming AU had been pivotal, but in practice he'd given AU enough credibility on economic policy issues to win the great mass of voters who wanted both tortured terrorists (which every faction had promised) and fat subsidies for the middle-class way of life. Add a telegenic Midwestern governor and victory came easily. The local director yielded the podium to Grunwald and Nil clapped with the rest of the crowd as the retired professor stepped into the spotlight.

*Emeritus* usually was a fancy word for "old," but Grunwald looked vigorous, perhaps in his late 50s, though with antiaging treatments (and Nil had no doubt Grunwald was ahead of him in line for Agerix treatments) one couldn't be certain. His hair was white but thick, no comb-over, and the lines of his face made him look distinguished, not elderly. He thanked the local chapter and gave an introductory joke everyone laughed at; his words came rapidly in a tenor voice and a Brooklyn accent.

Grunwald's speech delivered the usual mix of buzz phrases ("an end to selfishness," "the purpose that comes with unity"), contradictory policy prescriptions (preservation of jobs in the petroleum industry and expansion of ecofriendly solar power plants; free vat-grown meat for the poor and senior citizens, and further regulatory oversight of biochemical minifabrication tools), and veiled threats against "foolish believers in decentralized decision," "sowers of disunity," and "petty people resentful of the health care

safety net that will soon extend everyone's lifespan." For his Houston audience, he added a few words about the manned Mars mission supposedly to launch late in Everton's second term. The words wouldn't stir soup, let alone men's souls, but the bronzes and silvers around Nil leaned forward and stared with rapt eyes. Nil glanced at the MuSynths suspended in the gloom and smirked. With skillful crowd-psychological engineering and aerosolized neurotransmitter agonists, a speaker could read the telephone directory and be lauded by this crowd.

After the speech, Nil slipped through the chattering mass to the elevators. The platinum reception occupied a penthouse suite. A string quartet played near the French doors to the balcony. Waiters in white jackets, security cleared by NCS, circulated with trays bearing crab cakes and beef sashimi. Blue-suited debutantes circulated the room and catalyzed conversations. About half the guests had platinum membership pins; the other half were local, state, and federal politicians and civil servants.

A stout white fellow in a machine-cut navy suit was an obvious bureaucrat. He had a fleshy, florid face, combed-over hair, and a mustache. Mustaches made a man look either French or gay, and the bureaucrat's was too wide and bushy to be French; but Nil couldn't imagine anyone, male or female, looking at his beady blue eyes with any affection. Nil munched a crab cake and eavesdropped on the bureaucrat's conversation with one of his peers.

"Goddamn Boucher got another one transferred to Dent County. Yamamoto the brain scientist. Bastard's an e.c. And Boucher gets him?"

"Boucher's got POTUS' ear," the other said blandly.

"Wish I knew why." Mustache Man's tone was sarcastic and he snorted out a breath.

One of the blue suit ladies, a blonde with a round, madeup face and an effortlessly plastic smile, took Nil's attention away from the conversation. "How are you this evening, Mr. Thomas? Wonderful. I'm Melissa, if there's anything I can do, ask." She met his gaze and he read the frank assessment, *I know you're a multimillionaire but are you the best one I can find in the room?* Perhaps some of the blue suits weren't goldiggers, but he couldn't think of any off hand.



Could he find a woman who wasn't interested in his money— He smiled coldly in response. “Have you met—?” she said, and pointed to Mustache Man.

“No.”

She seemed relieved to hand him off without rancor on his part. “Sir, if I may?”

Mustache Man glanced at her, past her, and took in Nil's platinum eagle. Nil extended his hand. “Hi, I'm Nil Thomas.”

The other shook. “Bill Haycock.” He paused. “Go ahead, everyone sniggers the first time.”

Juvenile, yes, but his last name *was* humorous... Nil sniffed out a breath in amusement but cut it off when Haycock's eyes narrowed. He'd set a trap and Nil had walked into it open-eyed. Gnaw off your leg, quick. “I know what it's like. I switched schools for third grade and when I said, ‘My name is Anil,’” affecting a South Asian accent he'd never had growing up in Kansas City, “everyone called me ‘Anal.’”

“How'd your people get a name like Thomas? Englishman in the woodpile?”

Nil kept himself from showing offense. “There's been a Christian community in southern India for centuries,” he said nonchalantly. If the other were obviously a member of the City on the Hill Society, he would have played up the apostle Thomas directly founding the Indian church, but Haycock seemed the kind to be skeptical of myths. “You work for—?”

“National Counterterrorism Service. I'm an Assistant Director stationed at the main office.”

“How's life in New Washington? We appreciate the hardships it must entail for our public servants.”

“It's just the ass-end of Kansas. I've been worse places. What's your line of work?”

“I'm the Chief Operating Officer of TS Microcatalytix, a Titan Industries company. You may be aware of our products, the MuSynth and NuGland—” and from that Nil was off to the races. Crowd control? Interrogation assistance? If a high-ranking official of NCS might want to hear about it, he played up how TS Microcatalytix could help. Haycock asked smart questions and he

responded with smart answers. Whatever tactical error he'd made on first meeting Haycock had been overcome. Nil was in his element.

TS Microcatalytix had a two-story building in the Nolan Ryan Industrial Park near the Houston suburb of Pearland, about fifteen miles south of Clay's house. When his SUV pulled into his reserved spot near the front door, he put aside the catalog of vintage 35mm SLR Leicas he'd flipped through on the ride down. Meticulously ground lenses and the mathematical certainty of optics lingered in his mind's eye. Not that he needed another camera; he hadn't picked up his gigapixel digitals in weeks. But he didn't want to think about how some stranger knew more of the company's affairs than he knew himself.

Inside the front doors, the reception mannequin smiled at him from behind its counter. "Good morning, Mr. Schieffer." Its androgynous voice echoed through the double-height space. Clay glanced at it and pressed his lips together. It had the same abstract faceless shape as the wine-tasting robot at myfab, but at least its programming still bound this one. His soles crackled on the terrazzo floor.

In front of the windows at the foot of the west stair hung a hologram showing a cartoon animation of the NuGland. A blue raindrop shape clung to the inside of a red half-cylinder bisected lengthwise. Yellow cubes flowed down the length of the half-cylinder, hit the blue raindrop, and disappeared. Green circles appeared on the surface of the blue raindrop's base and slid through the red wall. They bubbled up and popped like carbonation in soda water.

Clay hated the animation. Too simplified. Though the raindrop shape was right, the cartoon didn't show the scale: the NuGland was less than three microns long and three wide at its thickest point. The cartoon didn't hint at the person-years and computer-months required to attach the microfabricator to the arteriole endothelium's lipid raft transmembrane proteins at target points in the recipient's vasculature. (Why synthesize a neurotransmitter in the liver)? It didn't show the receptors that grabbed substrate molecules from the

bloodstream, the combustion chamber that burned one such substrate, glucose, to power the unit, or the maze of microfluidic pumps and catalysis chambers which generated product. It didn't reveal the complex programming language that gave the microfabricator its flexibility or the transceiver that linked it to a doctor's orders.

It didn't tell the world the NuGland microfabricator was Clay's finest achievement.

It told Clay he had no comparable challenge left.

He trudged the stairs to the second floor landing. Paintings of central Texas landscapes, mesquite-covered hills and half-dry streambeds, hung on the far wall under security cameras, microphones, and sniffers. At the security door, the tiny red light of a retina scanner flashed in his eyes and the door unsealed with a demagnetizing thud. Two lefts, his standard morning greeting to Cynde, his secretary, and then into his corner office. The leather chair squealed under his weight and the video display flicked on and craned its neck to him.

How much email could he get by 8:45? Reports from QA, marketing, HR, compliance, and more compliance soured his mood. Finally something he cared about, an R&D report, but when he skimmed the summary ("Redesigning the geometry of the combustion chamber of the NuGland would increase power generation efficiency by 0.5-0.8%") he remembered again he had no challenge before him.

At least, no technical challenge. Last night's words of the robot operator came to mind. Clay dithered for a moment, then pushed his left index finger into a nearby pointing thimble and tapped the thimble to his wearable to establish the link. On the display, his point of view flew past the emails. Between a blue sky and a green ground, gray shapes like mesas sat at the horizon. The one on the far right would be the sales and marketing server.

Nil glanced up from the AU/Houston/Platinum wiki to take in Clay's SUV on his left and the overgrown jersey barriers in front, between his car and the building. 8:50, Clay probably hadn't beaten

him to the office by much.

Inside, Nil asked the receptionist if Ms. Colbert had arrived. Yes, now in her office. He went through the security doors on the first floor. Mostly labs down here doing wet chemistry and molecular dynamics simulations. Cooling fans on server racks hummed; racked MuSynths chugged; and compressed air pulsed to drive a fluid dynamics experiment. Down the side corridor to the freight entrance, a high grinding sound came from the machine shop and male voices laughed about something. In the main corridor the scientists, half of them refugees from Chinese warlords or Hindu national-socialists, showed deferent surprise: they greeted Nil and half-stepped aside for him. They didn't seem to notice themselves acting on innate human software programmed over a million years of evolution. Nil smiled and chatted and deftly pretended not to notice, either.

At one time, he'd known a lot about endogenous human biomolecules and MD sims to test small molecule bioactivity. Long ago, though, he'd realized thousands of people knew much more and could be hired for decent salaries and benefits packages. True success came from networking, brown-nosing, courtiership, and backstabbing, and while all but the most Aspergerish of the people around him knew that too—more innate human software—most shied away from those skills, subconsciously using them to acquire petty things like more sex from their spouse or a five-thousand-dollar raise. Nil knew himself to be a wolf in sheep's clothing, but one smart enough to leave the sheep placid and their meat tender and well-marbled with fat.

He followed the corridor around the corner near the auditorium. Scientist offices stood on the right—Nil passed a conversation about synthesis pathways for steroid hormones and a screensaver running an MD sim—and a side corridor led to more offices. Monica Colbert's stood at the end, in the northeast corner of the building, directly under his.

Nil shook his head to dismiss the symbolism. Technically, yes, Monica was number three on the TS Microcatalytix org chart, behind Nil and Clay, but in addition to her official title, chief financial officer, Titan Industries had assigned her to TS when it bought the company and she had the ear of headquarters in St. Louis.

More than the ear; every rumor pointed to Monica having an affair with Alexander Fisher, Titan's CEO. Her door was closed but light leaked underneath it. Nil knocked.

The door swung open. Monica sat behind a wide desk, cherry-stained and glass-topped, bare except for a few artfully arranged manila folders and framed photos of her with other coiffed, made-up young women with clear skin and fine bones. She wore a gray pinstripe suit, its shoulders padded, and a maroon ascot. A loose ponytail bound her blonde hair, save for a few fugitive strands artfully dangling past her ears. She attempted to look crisply professional, but her wide eyes and large mouth undercut the effect. "Good to see you, but can we make it quick? I'm flying to St. Louis for meetings and need to clear the decks before I go."

Nil nodded and entered the office. The door remained open as an offering to the sexual harassment furies. "I didn't see you at the AU meeting last night."

"I try to make them, you know that."

"Grunwald said the org will ask Congress and President Everton to raise the licensing and reporting requirements for chem nano."

"I'd heard," she said with a faint smile, and then she crinkled her nose. "You know that won't be a burden on us."

"Not for the foreseeable future, but I want us running a tight ship before the wind might ever change. If the executive committee underwent a change in personnel..." He let the prospect of life without Fisher's influence on Everton hang unspoken. Nil had seen multiple examples of a ranking bureaucrat getting purged and his fiefdoms suffering the same fate.

"I see what you're saying." Bland and noncommittal; he'd have to monitor the issue for a while to make sure she followed through.

Now that he'd laid a smokescreen, he raised his real topic. "One other thing. Clay's been acting strangely lately, don't you think?"

"Doesn't he always?"

Nil chuckled. "More than usual, I should say."

"I hadn't noticed. What details?"

"I met him last night for drinks and he seemed distracted. Something big on his mind."

Monica shrugged. "Maybe the next build of the NuGland? I'm

worried the schedule will slip.”

“No,” Nil enunciated. “If it were technical, he’d be upbeat and talking at the edge of my comprehension.”

“Maybe his wife’s finally going to leave him.”

Surprised by her comment, Nil cleared his throat. “He didn’t act like it’s worse than usual. Has he talked to human resources? Maybe there’s a health issue....” He gabbed; he sought to gain information, not to give it away.

Monica kept her poker face. “I haven’t heard a thing, but I’ll keep my eyes open.”

“I appreciate it. I’ll let you go. Good luck in St. Louis.”

She smiled, but weakly, turning up the corners of her mouth but leaving her eyes expressionless. Trouble with headquarters he didn’t know about? Or had he showed too much of his curiosity about Clay’s mood? Nil looked over her face but couldn’t tell which, and as he scrutinized her she resumed her poker face and he realized he would get nothing more.

Clay touched the thimble to the glass-topped surface of his desk and rows of a spreadsheet shuffled up the screen. He had burrowed deep into the data structures of sales and unearthed a master shipping fulfillment database for the MuSynth. Dates scrolled by and he remembered happier months, September and October 2019, when Martin was genescultured *ex utero* and he and Jenny made love surrounded by moving boxes on a mattress thrown down on the floor of their new master bedroom.

*Wait a second.* November 3, 2019, their biggest single order yet shipped: 600 units to Midwest Home Products, Erlanger, Kentucky. A quick flick to a zipcode map showed the town to be a suburb of Cincinnati a few miles from the airport. He’d seen that name elsewhere in the spreadsheet, hadn’t he? Clay frowned and scrolled up to earlier dates. MHP had been sent one order previously, eight units in late July, a few weeks before the negotiations with Titan heated up. Quite a jump in orders shipped by TS’ fabrication contractor in west Houston.

But he hadn’t seen MHP in the sales database, right? He flicked

over to an earlier spreadsheet his searching had generated, sales in the same timeframe, and muttered, “Find Midwest Home Products.” No hits. Had MHP’s name been entered differently in the sales data structures? He tried variants, acronyms. No luck. Had the order been shipped to them care of another company? But no single sale of 600 units had taken place in late October or early November. He told his computer to compare the two spreadsheets and highlight discrepancies.

The fulfillment spreadsheet pulled out a few rows, glowing green with data added relative to the sales spreadsheet. Shipments to MHP included 1400 units in mid-December, 1100 in late January 2020, 1600 on February 9, and then a lull. The lull broke in the summer, with orders ten-fold larger, twelve to eighteen thousand on eight occasions from early June until the third week of September. MHP’s 119,300 units were the most shipped to any company in TS’ first eighteen months of operations. And the sales database had no record.

Someone in fab had made up the order and shipped it to a non-purchaser? But their fab contractor would have been as automated as the facilities at a myfab store. No person could slip in an order and automated audits would have caught him if he had. More likely someone had removed MHP from the sales database.

Sons of bitches. In Titan’s agreement to purchase TS, Titan had contracted to pay royalties on sales of the MuSynth, \$12.40 per unit. The bastards in St. Louis had shortchanged him by \$2.5MM. He seethed at the monitor for a moment, then realized he could check the sales spreadsheet against his royalties report. After a few minutes of deciphering he found Titan had paid him royalties for the 119,300 units that didn’t show up on the sales spreadsheet.

What did MHP make? Another flick of his hand opened a browser to MHP’s website. *Midwest Home Products, a Titan Industries company*—

A knock on the door jolted Clay. Monica Colbert stood with her hand poised over the door and her mouth open. “Have a minute?” She sounded short of breath.

Clay pulled his left hand into a fist, twice, to close all the documents on his monitor, then leaned back. He didn’t have much use for her, but she generally did her job and left him alone. “Sure.”

She nodded at the monitor—it was edge-on to the door, she couldn't have seen anything—and said, “Working on the next NuGland build?”

“Yeah.”

“I'm leaving for St. Louis in a few hours and I wondered if you could give me an informal progress report?”

“Uh, sure, we're increasing the efficiency of the combustion chamber. And solving some of the binding issues involving caveolin phenotypes in black, uh, African-American populations.” That last was a wish, not a statement of fact, but she would never know.

“Good. Everyone in St. Louis is looking forward to rollout of the next build. Sounds like we're on schedule. Talk to you later.”

Clay breathed shallowly until she walked past his secretary's station and out of his line of sight. He slumped back in his chair and sucked in a deep breath. Sweat drenched the back of his shirt. He couldn't have fooled her, could he, by spitting out half-remembered details and wishful thinking?

He slid upright in his chair. Maybe he had. Colbert wasn't technical and wouldn't know any details on the next NuGland build and work being done in the labs. He never spoke smoothly, so his stumbling words wouldn't have tipped her off. She wouldn't guess what he'd been looking at. Nothing to worry about.

Except for server access logs. Clay didn't move, but his heart thudded. She could easily find out what he'd been looking at. But so what? She wouldn't know what those sales meant any more than he did. The only person with any claim as to what it meant was some anonymous hacker operating out of the Far East, but Clay had no way to weigh the other's veracity. He might be wasting company time chasing shadows.

Besides, he could sniff up information on Midwest Home Products as easily on the ride home.



## Three

The Titan Industries Tower dominated a cluster of mid- and high-rise office buildings in northwest St. Louis. Its curved, art deco lines of foamed concrete outwardly reflected the city's revitalization after the New Madrid earthquake of 2017, and its location, formerly site of the worst slums in the city, quietly hinted at the power of eminent domain and disaster-relief subsidies. From Alexander Fisher's office on the 49<sup>th</sup> floor, one could look past the high-rises and sports stadiums downtown, past the half-rebuilt Gateway Arch, and so far into Illinois that, through the haze, one couldn't tell where subdivisions ended and cornfields began.

Fisher stared through his reflection in the window and ignored the view. After months of hints, his wife had spoken bluntly last night, about ground rules and discretion and the best family-law attorneys in the metro area. She'd offered him the choice of discretion around the office and in St. Louis society, or the loss of half his fortune plus legal fees. Bitch. He gave her all she could reasonably expect: money for her charities and his presence at galas attended by the gossip columnists of stltoday.com. But she'd gambled she could extort more from him without driving him to pay hundreds of millions in a divorce settlement; and she'd been right.

A gentle chime sounded in his earbud. "Ms. Colbert to see you," his concierge said.

He tightened the knot of his handmade silk tie and stepped to his desktop cologne mister. He stretched his neck to receive a spray, pheromones and trust compounds. *Discretion around the office*. He smirked and told his concierge to let her in. Monica strode in briskly, smiling professionally, and he knew she wasn't worth a tiny fraction of \$620 million; and from the worry lines around her eyes he could tell she knew, subconsciously, she wasn't either. The door swung shut behind her.

"What's status at TS Microcatalytix?" he asked.

A good subordinate, she didn't hesitate before giving her report. Operations ran smoothly; sales growth matched projections. He knew she assumed he'd read all that in previous reports, and she soon moved to more subjective statements. Thomas had recently upgraded to platinum membership in AU and his eagle pendant had given him entry into new networks; Schieffer made progress toward the NuGland upgrade.

"Our garage duo's handling the pressures of stardom?" Fisher had picked up the metaphor from one of his MBA professors. Most entrepreneurs were like talentless teenagers jamming in the garage; only a few could put together music worth hearing. But of that few, fewer still had the business savvy and financials to cope with success.

She frowned. "Schieffer's been acting strangely lately. Yesterday I monitored him poking around on our sales server, and when I 'happened' to stop by his office he lied pretty poorly about what he was doing."

"Sales?" Schieffer planned to jump to a competitor or a startup and poach TS customers? Not credible. The dossier on Schieffer pegged him as a tinkerer, not a leader, and Titan's patent lawyers had his baby, the NuGland core technology, locked up.

Monica shrugged, nodded. "He was interested in shipments to Midwest Home Products in '19 and '20."

Fisher's gut tightened. He hadn't thought about the Free Samples Project in months; it was water on the bridge and should have long since flowed out to sea. The cosmos had joined forces with his wife to ruin his week. Christ, possibly his life. The problem wasn't Schieffer himself finding out what happened at MHP in those years—from the dossier, he knew Schieffer couldn't persuade a soul—but if he somehow infected others with that knowledge. Goddam—

Fisher snorted in a breath and straightened his spine. *When in doubt, lead.* "What exactly did he look at? All the data."

Monica raised her thin, curved eyebrows, but calmly said, "Let me check." She drew her display out of an inner pocket of her suit jacket and snapped her wrist to whip the display into rigidity. In the past he'd appreciated her ease under pressure compared to most of his underlings, but now he pressed his lips together and narrowed his

eyes. Did she think her status in his bed exempted her from the standards he insisted on?

“Spreadsheets of total sales and shipping fulfillments from July 1, 2019 to December 31, 2020,” she said. “He also browsed up a map of metro Cincinnati and MHP’s home page.”

“I said all the data.”

“He also checked his royalties reports for ‘19 and ‘20.”

Schieffer could have found the units shipped, but nothing more. Fisher eased his shoulders and lifted his head. “If he looks at that sales and shipping data again, call me immediately.”

Monica nodded. “Something big?” she asked lightly.

She had gotten above herself. “Need to know.”

“If I knew what he was looking for—”

“Christ, when I say ‘need to know’ I damn well mean it. Are we clear?”

Her face grew blank for a moment but then she recovered her professional expression. “I’m happy to do whatever’s in Titan’s best interests.”

“Good. Anything else?”

She opened her mouth to speak and Fisher mentally cursed for making the offer. “Do you have a moment? Out of the office?”

“I have a stableful of shit on my desk today.”

She didn’t look happy. He rolled his eyes slightly and moved his hands in broad arcs away from his head. “We’re out of the office. Five minutes.”

Monica smiled wanly, a crinkle around her eyes. “We haven’t gotten away any time recently. Wouldn’t it be good to reconnect? We could take a weekend at the corporate villa on Maui—”

“I’m booked.”

“We don’t have to go this weekend—”

“I am booked solid for a long time to come.”

Her chest heaved but her voice stayed level. “It wouldn’t have to be a weekend, or Maui. But sometime.” She swallowed heavily. “I remember you once told me how good you felt with me, how much better than with your wife—”

“Shit! You know I’m married.”

“And I know you’re unhappy—”

“You don’t know shit about my marriage,” he said, and his gaze drilled into her until she averted hers. “There’s your guilty conscience. Why didn’t I see it? You want half my goddam fortune —”

“Alex! No!” Her eyes were damp and her mouth pursed childishly.

“You’ve got promotions you only earned on your back. That’s all you’re going to get. Take that or take nothing.”

She gasped breaths but didn’t cry. “If you want it to be over, tell me.”

He leaned forward with a cold look on his face. “Okay, it’s over.”

She sobbed then and squeezed her eyes shut. Tears glistened on her eyelashes and trickled down her cheeks.

“And don’t think you’ve got a harassment suit, either. I’ve recorded every voicemail and email and saved all those salacious, inappropriate cards you sent. Be glad with what you got.” He moved his hands through the air, reversing the prior arcs. “Back to work.”

She ducked her head and scampered out and her sobs became choked-off cries until the door swung shut and returned the office to silence.

The toy monkey danced across the st. augustine singing nonsense syllables and Martin staggered after it. Clay sipped his scotch and put it on the glass-topped patio table, intersecting a condensation ring. He happened to glance at Jenny on the other side of the table. She sat on the edge of her seat, her hands clasped under her chin and her eyes tracking Martin. The boy plodded along the front of the flowerbed along the side fence. He would never catch that damn monkey. Clay returned to the display on his knee.

According to its website, Midwest Home Products made health, beauty, and household aesthetic products. The website splashed an ad for Auromatique, its new product line developed in a joint venture with a musicology company. The device released scents (generated by a MuSynth) in conjunction with music to perform mood engineering. Imagine if Jenny heard about that—

She gasped and then Martin cried. What now? The boy lay face-

down in the grass near the edge of the flowerbed. His fists flailed and his crying grew louder. Jenny rose from her chair and Clay shook his head. “He stumbled over his own feet. Let him figure out how to stand up.”

She pressed her lips together and set her fist on her hip. “If you’d been watching you’d have seen him trip over a sprinkler head.” She stalked across the deck, the soles of her mules loud on the cementitious panel, and jumped down to the lawn. The monkey sat on the iron fence between the lawn and the pool, a timid look on its cartoon features.

Even if the boy had tripped he wouldn’t have done worse than stub his toe, but try telling her that. Clay sighed and pressed a button on the display edge. While he stood the display rolled itself up and grew soft as cloth. As he shoved it into the pocket of his khakis, it shook and a chime softly sounded in his ear. He pulled the display out and read the name shown on the outside of the roll. M Colbert. Why the heck was she calling? Did she need to reach Nil but couldn’t find him?

“You’re answering that?” Jenny asked. She crouched next to Martin. The boy stood now, her hands holding his torso, his face red and petulant.

“Work calls me after hours only in emergencies.” He turned his back and unrolled the display. “Answer.”

Colbert sat in a car, based on the headliner and the glimpse of sky visible through the back window behind her. Thick makeup surrounded her puffy, bloodshot eyes. She sniffled. “I hope I’m not bothering you, Clay.”

“I’m at home.”

“I know what you were looking at yesterday. Sales and shipments to Midwest Home Products. You weren’t hiding.”

He slowly exhaled. Underestimating her had been foolish, but yesterday he had inflated his worry into groundless fear. “No, I wasn’t. Should I have been?”

“Yes. I don’t mean to sound harsh, I really don’t. It’s easy to think you’re on solid ground when you’re really on thin ice.”

“I have to hide my interest in my own company’s operations?”

She shook her head and the gesture triggered Clay’s resentment;

he wasn't naive "It's not your company anymore. You were looking at something St. Louis doesn't want you to see." She forestalled his next question. "I don't know why."

Over the previous two days Clay had jumped from conclusion to conclusion about the stranger at myfab, that he was an AU employee, a scammer, or a madman. Even after finding the MHP discrepancy in the database, Clay considered dismissing it as an innocent error. But now, while wind rustled the sun-dappled leaves of live oaks and Jenny scowled at him against her backdrop of blossoming yellow bells, intuitions crystallized in his mind. The stranger had been neither scammer nor madman; the discrepancy had been intentional.

*Drop it.* He could return to his corner office, comfortable lifestyle, and cavernous house and pretend he'd seen nothing amiss on the sales-and-shipping server. Mornings swimming laps in the pool like a pacing, caged predator, days shuffling virtual paper, and evenings drinking scotch, all the time shrinking inside, osteoporosis of the soul. He couldn't drop it. He would have to be circumspect—he could hire Zhejiang hackers to track the deliveries after MHP received them or private investigators to dig through that company's trash—but he knew now what he had to do. "I was double-checking my royalty statements, Monica," he said. From the corner of his eye he saw Jenny jerk her gaze away from their son and peer at Clay. "I don't want Titan to rip me off."

On the display, Monica shook her head. "You're a mediocre liar. Clay, I don't know what you were looking for. I don't care. But if you haven't found it yet I'm willing to help."

Obviously a trap. "I don't know what you mean."

"You didn't get into MHP's servers. I have high enough clearance to get you in there. All I ask is that you cover your tracks. Do you know how to use a proxy server?"

"I can." Could he trust her? Clay frowned. "What's in it for you?"

She lifted her head. "I've decided the time has come for me to leave the company. I won't regret burning my bridges."

He'd always assumed she'd been a happy employee of Titan. Granted he rarely talked to her, but did anyone ever know what someone else thought? Yet she offered him a key to the vault. What

was the catch? “That’s it?”

“That’s it,” she said. Clay checked her face for a hint to what else she wanted. Him? His money? She had worked with him for years, though, and never dropped a hint of such a thing, unless he hadn’t noticed. But her expression lacked seductiveness: furrows slashed from between her eyebrows to the bridge of her nose and her jaw clenched. Her anger at Titan was real; what she offered she freely gave.

Jenny slouched in a thick leather chair in the home theater room. On screen, in a ‘90s coffee bar, the outwardly aloof romantic lead bantered with the heroine he’d ultimately fall for: *Restless in Redmond*, a dot-com era costume drama, comfort viewing to keep her from crying. She’d bathed Martin, dressed him in his pajamas, tucked him into bed. Clay had grudgingly walked in and kissed the boy’s forehead and lied and replied to him “love you too,” then slunked back down the hall to pick at his dusty guitars or filter his photos. Or make a phone call.

His distraction and resentment made sense now. He was having an affair. The realization pressed down on her. She’d seen the evidence for months, years, but had let herself be fooled by pleasant memories of the past and the man she’d married. She didn’t deserve this. He’d brought on all their problems, tempting fate and subjecting Martin to genesculpting—barely approved in the fall of ‘19—and yet he blamed her for their son’s ailment and sought comfort somewhere else. Maybe his slut would let him genesculpt his second child.

Jenny imagined running upstairs, scooping Martin from his bed, and driving off, somewhere, anywhere. Her brother lived fourteen hours away in central Kansas, and his duplex on post had a guest bedroom and a fold-out bed. She caught her breath and pushed the thought away. Before she did anything she needed proof.

Nil would know, especially if Monica really did work with them. She told her concierge to pause the movie and call him. While the call went through she realized he would lie to protect Clay, but she could read his tells. She told her concierge to run his voice and video

feeds through an expression reading program to put a second perspective on the matter.

He sat in his living room, she could tell from the bronze statuettes and paintings behind him, and looked surprised to see her.

“Who’s Monica?” she asked bluntly.

Nil crinkled his face. “Monica Colbert. She works with us...” He trailed off and then looked at Jenny, his eyes wide.

“Are they having an affair?”

He blanched. “Good lord. An affair?” He leaned back and rubbed his forehead. “I haven’t seen it around the office. Not openly.” To her eye he told the truth, and the expression reader found no sign of evasiveness on his face. “But it wouldn’t surprise me.” His expression grew apologetic. “I have suspected it.”

“Suspected? How long?”

“Weeks? Months?”

Her face tightened. “You suspected my husband was having an affair and you walked into my house and talked to me as if you gave a damn about me and my son?”

Clay would have either wilted from or mirrored her anger, but Nil instead gave a firm look free of rancor. “I didn’t want to drive a wedge between you if I had no proof.”

She ended the call soon after. The room felt as large and soulless as the office she visited a couple of times a month. Nil was a better friend than Clay deserved. He’d told her the truth when asked but hadn’t volunteered it in the hopes Clay would mend his own fences. Hell, he was a better friend to her than she had expected; he hadn’t evaded her question; he didn’t treat her as a leper for Martin’s developmental disability.

He’d also spoken wisely about proof. They had two suppositions but no evidence. She couldn’t flee to her brother Roger’s house or retain a divorce lawyer yet, but if she so easily believed Clay was having an affair, she would need a divorce lawyer soon regardless of the proof. Their marriage was like a splintering raft. It would take both of them to lash it together; if Clay refused to help, the currents would separate them. She cried then but held a pillow to her face to muffle her sobs and catch her tears. Though across the house and asleep, she didn’t want Martin to hear.



After a time, her tears subsided, leaving her eyes puffy and a mucus taste at the back of her throat. She knew she wouldn't be able to think more that night. She told the movie to unpause. The next scene soon started, Seattle summer, a sunny blue morning, and from the tracking shot she recognized the scene: the romantic lead would accidentally reveal his sensitive and loving side while dog-walking along Lake Washington. Someone somewhere lived happily ever after.

The sun climbed the cloudless eastern sky above Fort Riley and drove off the dew laid down by the spring night in Kansas. After the winter's dormancy, green tinged the lawns between the post buildings. A robomower worked in the distance, its motor's hum echoing off brick facades and aluminum-framed windows. The hay smell of the season's first mow reminded Roger Sung of guiding the lawnmower across his family's suburban yard as a young teen.

Roger and his first sergeant, Hardin, strode the sidewalk toward battalion HQ and Lt. Col. Mueller's 0830 meeting. Roger's thoughts churned. Would they finally be deployed? He'd hinted it to Emma over breakfast. A chance to demonstrate the Light RTD paradigm in the field, but a field 11,000 miles away. She had been happy for him but her smile had still been forced.

He rounded the last corner of battalion HQ and saw Capt. Olafson, commander of Victor Company, approaching from the other side of the building. Olafson had been too tall for helicopter pilot school, a broad-shouldered blond with close-set brown eyes and a pixie chin. His eyes brooded under his black garrison beret. "What do you think this is about?" he asked.

"What else? Uighurstan."

Olafson shook his head. "Two years of occupation and they haven't deployed us yet. You know we're the red-headed stepchildren."

Of course he knew. Heavy RTD jocks ruled the roost at DoD, thanks to the sexiness of autonomous battle tanks and self-propelled howitzers and the cozy relationship of the procurement office with the kickbacks-and-overruns crowd at the defense contractors and the

kingmakers on the Congressional committees. The Light RTD paradigm used swarms of robots and teleoperated devices you could buy at myfab and its old advocate, Lt. Gen. Wickenham, now retired, had been a prickly bastard who'd made too many enemies. "Maybe Mueller and Maj. Gen. Johnson have bent the right ears. Maybe Heavy RTD is screwing the pooch in Ooo-stan."

"Those thumbdicks couldn't screw their way out of a wet paper bag. But winning or losing in Ooo-stan doesn't matter, Heavy RTD's only there to make it look like Everton is tracking down the 6:19 perps anywhere on Earth. They won't send us."

"Then what's the meeting about?" Roger asked.

Olafson glanced to either side and lowered his voice. "You read the r-mail."

Scuttlebutt, the rumor mill, backchannels; and men always said women gossiped too much. "Loyalty drugs?"

"Damn right."

Roger rolled his eyes. "They won't. We're officers and gentlemen. They don't want to fog our performance."

"Rog, get your head out. You know the technology's there. You've got a brother-in-law working in the field, right?"

He nodded. He'd never mentioned Clay had co-founded one of the big players in chem molecular fab; he didn't want to bother explaining why he hadn't resigned his commission for a soft job in industry. "Doesn't mean they'll dope us up with loyalty drugs even if they can."

Olafson shook his head and said nothing. Behind Roger, Hardin cleared his throat. "Sir, time to find out. 0826."

Headquarters occupied a low building in beige brick. Hedges bunched under the windows and a sign along the walkway to the front door announced 1 Light Robotics and Teleoperated Devices Battalion and showed the battalion's "Army Ants" logo. Inside, vinyl tiled the floor and Roger and the others passed the cubicle-divided offices of headquarters company personnel and civilian employees.

The main conference room stood in the middle of the building. The fluorescent lights gave everyone in the windowless room a washed-out look, like corpses on morgue slabs. Roger, Hardin, and Olafson were the last to arrive. The other company commanders,

Smith of Uniform, Ng the artilleryman, and Maldonado and Bauermann from maintenance and supply, wore smartcamo fatigues and stood with their first sergeants and some headquarters personnel among an array of hard plastic chairs. The graphics in their uniforms shifted with their movements and Roger focused on their faces to avoid a headache. Behind the front table sat tall, brown-eyed Lt. Col. Mueller, his narrow, triangular face pensive as usual. He talked to Maj. Gen. Johnson, broad-nosed and shrewd-eyed, the division commander, sitting to his left. To Mueller's right was a sharp-faced male civilian wearing a gray suit, probably Latino from his black hair and copper-toned skin. Sympathy seemed a stranger to his face.

Roger glanced at Olafson. The other nodded sideways at the civilian and mouthed *told you so*. Roger raised his eyebrow and shook his head slightly. The civilian didn't look like a doctor or scientist or some paunchy member of the bureaucracy's middle ranks. But what was he? And would Johnson attend a briefing prior to the battalion's deployment to Uighurstan?

Mueller called his captains to order and they took seats. "I know you're wondering what this is about," he said. "It's frustrating to shuffle paper and play red team/blue team on the back forty while the hog jockeys are getting the glory in Ooo-stan. We're better soldiers and can outperform them in any kind of war we are asked to fight."

Uighurstan, then; but Mueller glanced at the civilian next to him. "Not what we think," 1Sgt. Hardin murmured to Roger while Mueller turned back to face his subordinates.

"I now introduce Mr. Ramirez from the National Counterterrorism Service."

Ramirez spoke curtly. "Gentlemen, it's been almost four years since the June 19 attack. The fact no similar attack has been attempted since shows President Everton's original strategy, vigorous military action abroad and vigilant police work at home, is fundamentally sound. But you know as well as I do no plan survives contact with the enemy."

Roger had waded through Clausewitz in his military science courses at A&M. The preferred paradigm since the Reynolds years invoked evolutionary metaphors, war was a red queen race where

each combatant had to run faster and faster on the innovation treadmill to maintain parity with the other. What strategies had the 6:19 perps evolved?

“The global coalition of forces that’s been at war with the United States since June 19 has responded to President Everton’s original strategy. Bound as he has been by the precedents set by his forerunner’s failed policies, our enemies within the borders of the United States until now have only been faced with law-enforcement agencies coordinated by the NCS. The scourge of uncontrollable, unmonitorable minifabrication technologies—perversions of the pocket sinterers and photosynthetic MRE generators you carry with you on maneuvers—” and better known as *brownie dust* and *solar-powered shitboxes* “—has freed our enemies from supply lines, money laundering, and state sponsorship. Our enemies have enlarged their numbers, increased their armament, and improved their organizations and their training. They have carried war to our shores.

“We need you to stop them.

“For that reason, I am here to tell you that President Everton has invoked the Insurrection Act to allow the use of the United States military against armed enemy combatant formations. Major General Johnson has received orders from the Secretary of Defense to assign 1LTRD Battalion for this purpose. Questions?”

Tension filled the room. Yes, the unit had trained in counterinsurgency operations—the tactical flexibility of a light-robotic swarm made it ideal—but everyone had envisioned that training for use in shantytown streets and overgrown jungles in the Third World. Roger had never thought of operations on American soil and doubted anyone else had. He glanced around the room and most of the company commanders had hunched shoulders and narrowed eyes.

Olafson raised his hand. “Who will have command?”

“I’ll work with Lt. Col. Mueller to define objectives. Orders will officially come from him. We will attach task groups of NCS agents to you as needed for particular operations,” Ramirez added. Mueller’s long face stayed impassive.

“What ROEs do we have to work under?” Smith asked.

“Rules of engagement paperwork is being formalized,” Ramirez

said. “Generally, we authorize the use of non-lethal munitions only unless your equipment takes man-lethal fire. Then you can retaliate in kind.”

Domestic politics still offered some constraint. The tension in Roger’s shoulders eased until another question came to him. “This is the first briefing we’ve received on insurgency by domestic terrorists. I’ve never even heard rumors from military or law enforcement personnel about this.” The men nearby shifted in their chairs away from him and the ones in the rows in front of him turned around and peered his way. He knew they hadn’t heard rumors either, but none wanted to question the NCS agent and the vast, secretive bureaucracy he represented. “How extensive are domestic terrorist insurgency operations?”

Ramirez smiled. “I’m glad to hear NCS’ rumor abatement procedures work. You shouldn’t have heard about this. We estimate twenty-five to thirty thousand people are members of domestic insurgency groups. Few such groups have become fully operational, but know-how is diffusing through these groups. Slideshow.” The lights dimmed and the wall behind Ramirez, Mueller, and Johnson glowed. A photo showed a shack of weather-worn gray planks and rotting shingles, set at the edge of a brown stubbled field. The next showed an interior view of the same shack with its floorboards peeled back to reveal a stash of rifles, rocket propelled grenades, and mortar rounds; plastic-and-metal cubes, partially disfigured by solder, glue, and bare wires, but recognizable as chemical molecular fabrication reactors, arrays of miniature machine tools, corpsman kits, shitboxes, and sinterers. Stuff you could order from a wood- or metalworking tools catalog, pick up at Bass Pro near the K-State campus in Manhattan, or steal from a National Guard armory with inside help.

“Goddam,” Maldonado said. “You could keep a rifle platoon in combat indefinitely with all that.”

The image changed again, the same field from a different angle a few yards into a wood, the shack in the distance. In the center of the photo, a camo net stretched between pine trees and hung over a pickup truck. The Bubba’s Customs logo stood plainly visible on the tailgate. A camper shell yawned open over the pickup bed and a 120

mm mortar tube thrust up from a metal frame bolted onto the bed. The frame mounted a pair of robotic arms for loading. It became Ng's turn to swear.

"We recently found this in a raid on one cell of a white supremacist group in North Carolina," Ramirez said. "They aren't alone. Not only do they have other cells we haven't penetrated, but other groups with similar armament and organization are active: the American Bantu Self Defense League, Fuerza Aztlan, GaiaFist, and others."

Roger rested his mouth against the knuckles of his fist. In a country as large and populous as the United States, thirty thousand men could join insurgent militias and not be noticed. Dropouts could live off photosynthetic MRE generators; greenies from Portland and *vatos* from south Phoenix could drive into the wilderness and play soldier at night or on weekends. But if NCS had noticed them, they must have poked their heads out of their foxholes and fired on some government official. Between e-mail and bloggers rumor would have spread, even to central Kansas.

Was Ramirez' brief a fraud or had the administration silenced journalists both big and small?

The lights came up and washed out the display. "More questions? No?" the NCS agent asked. "Then let me hand you over to Maj. Gen. Johnson and Lt. Col. Mueller. Before I go, let me say again that I thank you, Pres. Everton thanks you, and your country thanks you for your service." He rose imperiously and strode out. As he passed, Ramirez' gaze flicked over Roger's face and nametag SUNG.

A few seconds after Ramirez left, the company commanders started talking and the volume quickly built until Johnson said "Gentlemen!" Silence fell save for the last echoes ringing off the drywall. "I'm sure this came as a surprise to you. You're not alone. If you have questions, spit them out."

No one else wanted to be the first, so Roger spoke. "Have we corroborated NCS' intelligence on domestic insurgents?"

Johnson nodded gravely. "Yes. There are groups out there caching weapons and preparing for combat. You're wondering why it hasn't made the blogs? NCS has asked them to keep quiet to minimize copycatting and they've complied."

“And the ones who publish anyway get arrested,” Bauermann said.

“We all know an enemy combatant when we see one.” Johnson shrugged. “Also, gentlemen, this is our chance to prove the LRTD paradigm in the field. That means more respect for our arm and the formation of more battalions.” New battalions would need new commanders and where better to find them than from experienced LRTD officers? Roger briefly imagined himself two ranks up the pay scale with a command entrusted to him.

Mueller looked over the company commanders. He knew them far better than the two-star general did. Mueller had lobbied his superiors to establish a light robotics unit in the Reynolds years and had commanded 1 LRTD since its formation. He had recruited his captains personally, and though he was knowledgeable about the machines they guided he was a shrewder judge of people. “Some of you are uneasy about the invocation of the Insurrection Act. I understand. This is a new step for the country and for our unit, but when people can build this—” he pointed with his thumb at the washed out display of the robotic mortar behind him “—with the example of 6:19 in their minds, it’s necessary. There are enemy combatants in our country only we can fight.” Mueller’s gaze landed on Roger and the latter straightened his back. He had been given delicate and dangerous orders because only he could carry them out. He and his first sergeant; he and his brother officers. The mood in the room lifted.

Johnson spoke. “While we have you together I want to address another matter. I know rumors are floating around about loyalty engineering. R-mail has, as usual, turned a molehill into a mountain. I’m here to set the record straight.”

Across the room, Olafson folded his arms. Roger returned his attention to Johnson.

“The Army is dedicated to maximizing its personnel’s combat performance and minimizing their susceptibility to psychiatric casualties. You’re familiar with both semipermanent and acute combat supplementation for those ends, and the defects in both are obvious: customizing dosages for the soldier, delivering tablets to the soldier, ensuring the soldier takes each dose as instructed, and for

acute comsup, educating the soldier as to which supplement to take at which time. Those defects are solvable when we're wargaming on the back forty, but we're finding from Uighurstan they're a severe problem. Soldiers are suppressing their fear too far or not far enough. Soldiers are suffering from insomnia or narcolepsy. And worse." Johnson grimaced. *How much worse?*

"We can implant devices to reduce those problems. They'll produce small doses of supplements in precise locations in the brain at the proper time. No need for a quartermaster to deliver pills, no risk of sending Peter's genome-tailored pills to Paul, no temptation to increase or decrease the dose. You may have heard rumors to that effect and they're true. It's a much better solution.

"Now there's another set of rumors out there. That the Army or the civilian leadership wants to turn you into Pavlov dogs who'll salivate every time the President rings a bell. I have two words for you. Not true," he enunciated. "If you're worried about it, put it to rest. It won't happen."

Roger wondered what backed up Johnson's words. From the seat to his right Mueller stared ahead and bobbed his head.

Johnson went on. "You and all the men in your units will each be assigned a meeting with medical staff for implanting devices prior to embarking on the Insurrection Act missions Mr. Ramirez indicated. Questions?"

Olafson stirred but kept silent. So did everyone else. *Are you going to be the first to call bullshit on a two-star general?*

Mueller breathed in and sat straighter and the movements brought attention to him. "You won't be the only ones given these implants," and tapped his temple with his finger. "Don't worry, it doesn't hurt at all." After the meaning sank in, a couple of men laughed nervously but quickly stopped when the light colonel fixed them a look. "Where's the humor, gentlemen?"

"No humor, sir," Olafson said. "It's inspiring to see an officer lead by example."

Mueller surveyed the room, and Roger's doubts faded in the imperturbable certainty of the lieutenant colonel's gaze.