



Robert A. Heinlein Centennial
Writing Contest
Winning Stories

Introduction

The stories in this volume were submitted as entries in the 2007 Robert A. Heinlein Centennial Writing Contest. The judging criteria were to select short works of fiction that met the usual standards of literary excellence while representing the qualities that distinguish Robert Heinlein's fiction. There were indeed a number of submissions that met all literary standards but failed to adequately impress the judges as being sufficiently "Heinleinesque."

These six stories represent a winner, an honorable mention and a special recognition winner in each of the amateur and professional categories. Only the winner and honorable mention awards were defined in the contest rules, and each carried a \$175 and \$75 cash prize, respectively. In each category, a third story was found that for one reason or another fell behind the other two in merit, but stood so far above the other submissions that the judges felt it worthy of notice.

This will be the only official publication of these stories, in PDF form via the Heinlein Centennial website. This publication will be removed on 7 August 2007, 30 days after the winning announcements, and will not be returned to public availability. Each of the authors is encouraged to find other publication for these works, which all deserve the widest circulation and appreciation.

Contents

Hammers and Snails	1
Winner, Amateur Category	
<i>Christopher J. Howard</i>	
A Condition of Intelligence	9
Honorable Mention, Amateur Category	
<i>Robert Jenkins</i>	
World Ceres (excerpt)	18
Special Recognition, Amateur Category	
<i>Sandy Sandfort</i>	
The Beautiful Accident	19
Winner, Professional Category	
<i>Edward Carmien</i>	
Refuse	25
Honorable Mention, Professional Category	
<i>Marjorie Dieter Keyishian</i>	
B All U Cn B	33
Special Recognition, Professional Category	
<i>Fran Van Cleave</i>	

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Hammers and Snails

Christopher J. Howard



Still a bit weedy from my eleven-year journey from Earth, I stepped off the curb two blocks from the Lassandra Worldport and a delivery car hit me at high speed.

I had my wallet squeezed open while I thumbed through the ticket deck for the tab that would take me to Siddaq Reach. I glanced up. The car's low hood shoved my legs out from under me, tossing my body three meters above the street, sent my arms into a clockwise spiral, shoulders dislocated, lifeless hands slapping the sides of my ribcage, my travel pack in emergency mode, clinging heavily to my suit like a bear cub clawing a hold on a loose windsail.

The steep adrenaline cascade slowed time. The air was thick, and I hung in it like a net. My eyes swiveled left toward the vehicle, a blur of slick white molding, afternoon starlight papering the windshield in wide opaque sheets, but through one clear slice in the reflection I saw the driver's teeth, a double row of angry ivory, lips peeled back skullishly like an anatomy sim.

I remember thinking, less grav here on Lassandra, maybe I'll bounce. I hit the pavement like a hammer. Bones crumbled, organs sloshed and compressed, my skull felt as if it was in a couple pieces, cupping my brain like a wad of wet clay in a box of broken pottery. My travel pack hugged me lovingly, remain-with-passenger enabled.

Sir Philip is going to be so disappointed.



"Mr. Norr? Huan Norr? Of...Cambridge, England, Earth?"

The room rocked slowly like a boat in a calm. My mouth opened, and my warm breath hit something hard that stood a few centimeters off my face, turning each exhale back to eddy around my cheeks. The slow rocking came from the motion of my chest rising and falling. I remembered a woman's voice, calling my name, then the hiss of released pressure and the seals of the surgery case coming loose. My eyes opened and went wide, startled, seconds too late.

"Yes?" My voice was crusty, dry and unused, as if I hadn't spoken in days. I sat up slowly, braced on my elbows.

"Please stand, sir," she said politely, soft practiced edges in her tone, but over a disciplined core.

I blinked and put some effort into keeping my eyes still, focusing them on her face, but they slipped down her jawline, along a slender line of gold jewelry at her throat to a pink badge pinned to the stiff white collar of her uniform. Post-Surgery Care, Technician Benecka.

What sort of name was that? Trying to think back on the Lassandra cultural handbook. Large population from São Paulo here, significant group from several mid-African nations, a smaller set from a city in the American mid-west, Lafayette, Indiana, I think, a bunch of Purdue grads caught up in the colonial spirit of the time.

Benecka had her hair, black as obsidian, pulled into a tail at the back. Her face was a fit combination of rounded edges and planes, warm brown skin with freckles on her nose, a perfect circular mole at the apex of her arched right eyebrow, and a tiny four-petal flower tattoo marking the joint of her jawbone. Her eyes were unusual. They held mine for a moment, purple facets with tiny brown flecks, like amethyst and autumn leaves.

"One foot at a time, Mr. Norr."

I couldn't place her accent, perhaps Lassandran divergences in the English by someone raised speaking Spanish or Portuguese? A flower's scent distracted me, sweet, with a hint of soft citrus.

I twisted my neck around, looking for the source as I pulled my knees up and threw my feet over the flexible edge of the case. I pushed off with my hands and landed unsteadily on the tiles. She shook her head, disapproving, and caught me by the shoulders.

"They're fresh," she said, covering a reproach when she saw me staring at the vivid orange blossoms in a vase on a corner wall ledge. "MedCenter puts those in every incoming's room."

“Do they?” I asked and looked around the pale green cube with a new eye, stopping on the view through the windows. The horizon cut the scene in equal parts, cloudy sky and lush green forest roof. The distant view didn’t hide the fact that some of the plant life grew at odd angles, not drawn toward Lassandra’s star. Sir Philip was right. My kind of world.

Benecka gave my shoulders a quick squeeze to remind me to stand on my own and turned to pull out a set of hospital garments from the closet.

I dressed, and she directed two lower ranked technicians to remove the surgical case and prepare the bed. Benecka stood stiffly against the wall next to the door, arms crossed, watching them work. She waved me back in bed, came around, and tied me to the mattress, a thin flexible strap from my left wrist to a holdfast on the side.

“What’s this for?” I pulled on it to gauge its strength then yanked hard, using my body’s weight, lifting the mattress askew.

Benecka looked amused. “A light restraint, not meant to hold you back, but you’d look silly trying to get out of here dragging your mattress behind you.”

My face went blank as I tried to think of the correct name for the police, Lassandra Enforcement, something like that?

Benecka read the look and said, “LEX wants to talk to you about yesterday’s accident.”

“LEC’s? Law Enforcement...” I flipped through several C words. “Corps?”

She nodded, tugging the mattress back in place. “Two Ls, one for Lassandra, if you want to be proper.” She straightened, staring at the wall above my head, her focus inside, listening to some internal comm gear. “You have a visitor, a Mr. Musni.” She paused over the info feed. “A bakery owner.” Her lips tilted up at the corners. “Perhaps someone’s sent you cookies?”

I shook my head, frowning. Sir Philip Wallace wasn’t a cookie person.

Benecka eyed Mr. Musni suspiciously as they passed each other at the doorway, but tilted her head a hint in automatic greeting.

Musni ignored her and headed straight for me, blood-shot eyes blinking and narrowing, studying my face. My eyes dropped to his hands. Where were the cookies? Musni dug one hand in his jacket pocket and pulled out a lusterless black handgun. “Even up time, Mr. Norr,” he snapped my name with a nasally laugh, and couldn’t stop himself from hesitating over the follow-up chuckles that had his lean body twitching. His baggy pants shivered with the glee that seized him.

“What do you want?” My voice was thin with fear, gasping the words. Scariest damned baker I’ve ever met.

“You, Mr. Norr, in pieces that can’t be put back together, Mr. Norr.” He seemed obsessed with saying my name. He laughed again. “It’s fitting. ‘Nor’ is the name of a common snail-like creature here, a nasty pest that gardeners poison without sympathy. Wholesale slaughter of Nors is widespread on Lassandra.” He shot out the last line and raised his gun, aiming at my face. I couldn’t move, except to pull the restraint tight against my left wrist.

A battery of pulse stunners dropped from ceiling panels, swung to Musni, sighted and fired. The baker went rigid, lost his gun in the disruption, and sagged along the wall to the floor, his eyes pale moist balls rolling up behind half opened lids.

Benecka was back. She skidded against the doorframe, out of breath. “Mr. Norr?”

Her voice released the lock on my muscles, but didn’t prevent my own from shuddering. “You have guns in the ceiling?”

She stepped in cautiously, relaxing a little when she saw Musni on the floor. “Just in these post-op rooms.” She waved vaguely parallel with the outside wall of windows. “For patient’s under LEX hold.”

“HOLD!”

I jumped in shock, snapping the restraint tight as four armored commandos stormed in, guns up. Two went to the windows, necks craning to study the MedCenter grounds. One remained at the door, facing the hall. The last, obviously in command, holstered a handgun and bowed to Benecka, smiling like an old friend.

“Pleased to see you again, technician.”

His eyes shot briefly to one of the window guards, passing a silent command to clean up Mr. Musni. He spent a moment studying the gun Musni had pulled, and then he looked at me, his smile remaining.

He might have been a descendent of the African colonists, speaking English with an accent vaguely French, his skin the color of a cup of long-steeped tea with fine lines of age starting at the corners of his eyes and mouth. No taller than Benecka in his combat boots, he was broader, muscular, and went halfway to crushing my hand in a shake.

“Good to have you in one piece, Mr. Huan Norr. You were an absolute humpty when they brought you in.” He nodded to Benecka. “Finest treatment services on Lassandra right here in the Worldport. I’m told seven hours in surgery before they had you glued back together.” He shook his head and whistled sharply, amazed.

“I seem to be. My strength has returned.” I rubbed my chin and tilted right a little to look at the gray stripes on

his shoulder, wondering at his rank. "Although, it's a bit awkward to have someone--a baker of all things--want to kill me minutes after I wake."

He noticed my glance at his sleeve. "Sergeant. Sergeant Nesham. Mr. Musni was driving the vehicle that hit you."

Sergeant Nesham missed my shock because he turned to Benecka. "Can you give me a few moments with Mr. Norr?"

His team left also, one pushing Musni out on a gurney.

Nesham swung back, smile gone, just sharp calculating eyes. He leaned forward. "Did Musni say anything to you?"

I was a little embarrassed about it. My face went hot, and the Sergeant ratcheted up the seriousness in his stare. I nodded. "He laughed at me. He said I shared my surname with a snail that Lassandran gardeners regularly exterminate."

"Different spelling. What else?"

"Nothing. He just pulled the gun...and laughed about my name. I only knew his name because the technician told me."

Nesham nodded. "MedCenter scanned Musni coming through the front door."

"Don't they scan for weaponry?" I swallowed the petulance. "Sorry."

The Sergeant dismissed it. "That's worrying. They do. It's normal. Musni was carrying an exotic, not picked up by the scan. Stuff's priced way out of his range."

"And bakers usually carry arms here on Lassandra?"

Nesham snorted. "This one did. Musni's specialty is wedding cakes and custom dining services for...special customers. Even if some of his clients aren't of the highest quality, Musni had a healthy rep." Nesham frowned, his eyes drifting away, toward the horizon. "Till you showed up."

The sergeant left two of his commandos to guard the room, one positioned against the window, the other at the door, weapons out, pointed at the floor. Benecka returned twice to check on me, the last time to tell me that Sergeant Nesham was questioning the baker, and would be back tomorrow for a follow-up.

So, I remained tied to my mattress. I couldn't sleep, and sat up late, reading back issues of the *Journal of Aquatic Xenobotany*, going over the latest, which contained Wallace's, "Seasonal growth of the two *Laviolanis* sp. in Siddaq Peninsula on Lassandra." It was still under review when I left Earth, although he shot me a pre-press copy to read along the way.

"Sir Philip Wallace," I whispered, trying to keep the reverence out of my voice. Soon, there would no longer be a

need to hide. I'd never see my teacher again--in the physical, but I could study here, carry on his work, be open and proud to take up his mantle.

I let the journal hardcopy fall on my chest and closed my eyes.

I woke to the sound of a sloppy wet thump against the windows. I shot up in bed. A dark smear of motion pulled my focus around, one of Nesham's commandos pointing at me with a gloved hand. He shouted, "DOWN!" but he was only halfway through the one syllable when the limpets blew, throwing high-velocity angles of window into the room.

Seven hours of surgery and some rest had done wonders for my reflexes. I heaved my body away from the blast. The mattress followed on its leash, shielding me for the most part, as I flipped and landed face down on the floor.

Groaning against the cold tiles, it seemed several seconds before the window shards finished carving up the inside of my hospital room, and several more for the sound of falling wall board, clothes hangers and pieces of the closet door to come to rest.

There was a pause of silence and then the light crunch of shoes on broken windowpane. More ceiling panels dropped, stunners ranged and fired, and the intruder went down in the rubble.

"Not another baker?" I cried weakly, a shallow madness seizing me as a tech named Mauro snipped the restraint and pulled me from the ruins of my room.

A continuous shiver ran through my body, sloshing up against my skull, mounting and rolling back to my feet. I rocked unsteadily as I followed Mauro down the hall. I barely noticed the yellow crisis strobes and beeping tones from monitors up and down the post-op wing.

I slammed rudely into a heavysset blond man coming the other way, body gown and facemask up for surgery.

"I'm so sorry." My hands came up shaking.

He shook his head dizzily. "I wasn't paying attention either. Careful with this."

He had me hold a sprig of some thorny plant that made a bloody mess of my fingers, while he bent to retrieve a stack of books I'd knocked from his arms. He wore gloves to protect his hands.

I wiped mine on my hospital pajamas. They were already streaked with dust from the wallboard and speckled in what may have been the commando's blood.

Mauro led me to a chair in a room at the end of the wing, and left me.

"You ain't hammered are you?"

I looked up at unshaven features, creases deepening around the corners of his mouth as he pulled his face into

an angry knot, white eyebrows jutting militaristically, hands curled into fists.

“No.” I wasn’t level on my feet, but no reason to jump to conclusions. “Someone just tried to kill me.”

“Oh.” He nodded. “In that case, Carl Deprato.” He waved congenially, and then flipped one thumb at the other bed, neatly wrapped, ready for a patient. “We bunking together now?”

He had the bed by the window, which was fine by me. “I’m not sure. I think the tech brought me here to sit down while they clean up my room.”

“You got a name?”

I started, nodding apologetically. “Sorry. The blast knocked my manners crooked. Huan Norr. Pleasure to meet you, Carl.”

“Huan? You from Earth?”

I nodded, rubbing my eyes. The little nubs of thorn bites on my fingers were rough on my lids. “From England.”

“What brings you out to Lassandra?”

I was too tired to shake him off. “Plant studies. Non-phototropic mechanisms. I’m a student of Sir Philip Wallace.”

I felt the temp drop in the room. After a long pause he asked, “What’s non-phototropic?”

“You know, the way plants bend toward light. Well, some don’t. They bend toward...something else.”

He shook his head. “I was born here.”

Scholar mode kicked in. “Phototropism in Earth plants is the result of the regulated distribution of the hormone, auxin that weighs down the stems and leaves on the side opposite the sun, bending the plant in order to maximize the reception of incident light.”

“You going to study the Laviolas then?”

Everybody does. I nodded. That part wasn’t a secret. They were tourist traps anyway. You couldn’t come to Lassandra and not see at least one of the six remaining Laviola species. And for a botanist, they were Mecca.

He didn’t need to know that most of the Lassandran botanical life was drawn to the gigantic plant-like structures of the Laviolanis species, rather than the star’s own light. Sir Philip thought he knew why, and I was Sir Philip’s personal agent, handpicked for this discovery, sent across the stars to sacrifice myself. I felt a spark of daring flare inside me. Carl looked old enough, and I’d picked up an obvious animosity toward my teacher. “What can you tell me of Sir Philip’s work when he was here?”

He snorted at the title. “Knighted, eh?”

“Two years before I left Earth.” I ticked the numbers off in my head. “Almost thirteen years ago, when he went

virtual, just after he was awarded the post of Professor of Botany at Cambridge.”

“We don’t get regular news from Earth, just the big stuff, costs too much, and there’s still a sixteen day lag on that. We don’t have real full-time virtual here yet, just the games and transients. Not enough wealth on Lassandra for full-time virtual, not even the ORCs have enough to import the tech. We live and die physical. Same as it’s always been. Oh, and Sir Philip left my father to die. The grief sucked the life from my mother. My father’s slow madness drained her spirit. She died before I was twenty.”

“I’m...I’m sorry,” I whispered automatically, eyes on the tiles, my head suddenly becoming too heavy to lift.

“It was a long time ago.” A sharp edge slid into his voice. “You aren’t going to ask how?”

Of course, it gnawed at me. I didn’t want to know. “Sir Philip’s a very...driven man.”

“He went offworld seventy years ago, and left his students to die, torn, piece by piece, sucked into the Laviola at Siddaq! They were all tagged, became its food, and Sir Philip Wallace let them, encouraged them to become part of its life-cycle, told them that was the only way we’d be able to understand how the Laviola functions. He said ‘We’ and then let them die. Wallace got away clean, sneaking off Lassandra like an assassin.”

I shook my head. He wouldn’t do that. “Your mother wasn’t a student?”

“She was. She escaped the Lavi. Became un-tagged.”

I choked on the surprise. “I didn’t know that was possible.”

He gave me a doubtful squint. “The hammers left her alone.”

I backed my head off my shoulders. “Hammers?”

“You playing stupid, scholar boy?”

I shook my head.

“Your mother?” Benecka asked sharply from the door. We both swung our gazes to her. “She gave birth to you, Mr. Deprato. That’s why.”

Benecka tossed the *Journal of Aquatic Xenobotany* to me accusingly. “A botanist? You’re here to study the Laviolanis?” She cut off the upswing of my nod with, “What do you know about it?”

I stuttered a little, gathering words. Just answer the question. “I know the plant--”

“It kills people, takes their sprit. It’s much more than a plant and you know it, Norr.” She snapped and pointed at the journal.

Wallace had hinted at local antagonism, but I hadn’t expected every other person on Lassandra to be familiar with the Laviola lifecycle or Wallace’s work.

"I know it can grow to the size of a small city, there's only six of them on the planet, it chemically tags its victims, it acts as a breeding farm for a Lassandran chiropteran."

"The bats are called 'hammers' here."

"Ah." I nodded, getting Carl's first question. I had heard the term before, but it was slang, and certainly didn't appear in the peer-reviewed press. "They obtain food for the Laviolanis, becoming its couriers. The plant enslaves the animals, the hammers, through addiction. The hammers have sophisticated homing processes. The Laviola injects a trace scent into humans, tags them, and the bats attack using a variety of methods, some of them very sophisticated for perceptual-level animals." On a roll with my delivery. "Wallace says there's no range limit. The hammers will find you wherever you try to hide. They steal pieces of the tagged person, biting the skin, drawing blood, taking approximately square centimeter portions at a time. The hammer returns to its source Laviolanis, offering the piece of you in exchange for its fix. Hammers breed, their young are raised into addiction."

Nothing new here.

"Did you know the hammers don't attack if you peaceably allow them to take what they've come for? You didn't know the Laviola won't tag a female who's given birth?"

She pulled me into her dark purple stare. I felt my mouth sag open, but didn't do anything to stop it. This is what drove Sir Philip on. "How does it know?" I breathed the words.

"Your job, not mine. Did you know that time sometimes slows to a crawl for the afflicted, but to the outside, it seems a hideous wasting death, the cruelest form of punishment, harried by the bats, who steal your flesh and blood to feed its master, the Lavi that bred it. Tagged ones go mad, burdened by nightmares, sensory displacement, waking dreams, visions, mentally they're doomed. Unless you're female and able to bring a child to term, there's no coming out of it, and once you're infected--tagged--LEX won't let you offworld. A permanent quarantine on Lassandra."

Who is she? I tilted my head a little to get a better look. "Your tattoo?"

Her eyes narrowed. She swiveled her head a little, showing me her jaw and the little four-petal flower inked there. "I have a six-year-old son. I'm the only practicing tech at MedCenter with tagged patient care duties. There may only be five or six on the planet who want to get into it. Not a popular line of work."

"There used to be seven Laviolanis."

"So history tells us. The second wave colonists nuked one. We've always known there was something dangerous about them."

I knew the story. Just hoping Benecka might fill in some gaps.

I pulled in a long breath and let it out slowly, a sliver of doubt knifing through me, wondering if my teacher had betrayed me, sending me here with specific instructions to become tagged by the Laviola at Siddaq Reach. If it meant my death, why would he do that...and to me, most devout, his greatest student?

Carl stared out the window at the dawn. Benecka gripped the doorframe, and bent backward into the hall to follow some activity outside my room.

"Norr?"

I looked up, blinking, and then wiped a tear from my eye. "What?"

"They ID'd the window-blowing intruder. It's the bride."

I gave her a blank stare.

"Nesham's here. C'mon. He'll tell you all about it."

I nodded to Carl on the way out, trying for friendliness, but it ended up cold. Benecka left me in a small conference room with Nesham.

"Her name's Zona Spohnholz."

I shook my head. "Never heard of her."

"You wouldn't. She just married the eldest Azzarito son." Nesham flipped up an image of a blond muscular man in an expensive suit, clean-shaven, eyes startling gray. "The ceremony was the day before yesterday, the day you arrived on Lassandra. Azzarito's one of the ORCs."

I gave him my best one-raised-eyebrow-questioning-stare. "He doesn't much look like the ones I'm familiar with." I've played the holos. It's been a while, but orcs were something out of stories and games, not real, and, even if they were, they didn't seem the sort that wore business suits.

"Not orc the monster, but syndicate, organized crime, bad guys. Azzarito's a hitman. And my guess's he's blaming you for disrupting his wedding. They tell me it's supposed to be the happiest day of your life."

My skin went icy. "Me?"

Nesham shook his head slowly. "The baker, Musni, was on his way to the ceremony, bringing the cake and four hundred confections. Not only did you hold him up, prevent him from getting to the wedding on time, the cake didn't fare well. Plastered all over the back wall of his delivery car."

"Oh."

"Musni wants you dead. I suspect he's hired a backup in case he failed to take you out. So, that's another one you have to watch for. Musni apparently lost a lot of money on the deal. Zona wants you dead. You ruined her wed-

ding. Azzarito wants you dead. You made his new wife cry. You're not a very popular man, Mr. Norr."

That's when the suffocating nightmares started. I gagged, rubbing my throat, went blue and hit the floor.

I woke shaking, feverish, haunted by a continuous sensory stream that seeped into every corner of my mind. It touched every cell in my body, a cold, dark, drifting motion, sleep from which I couldn't wake, cables going into my body, feeding it, keeping it alive but suspended, out-bound tubes brought my insides to the things that fed off me, things with teeth.

"You're tagged."

I sat up on my elbows, shaking off grogginess. "What?"

Benecka stood at the foot of the bed, glaring at me as if it was my fault.

"How?" I glared back, parroting her.

"You didn't come in tagged. You wouldn't have gotten through surgery without it showing up. You've only been here three days!"

"I haven't been anywhere near a Laviola. I haven't been out the hospital yet!"

"You have tickets to Siddaq in your wallet."

"Unused."

She nodded defeat, waved it away, and tried a different line of attack. "You follow that fool, Wallace."

"A visionary."

"Murderer."

"You don't know him. His students would follow him to the end of the universe."

"Messianic murderer, then."

"I know him, maybe better than anyone ever has."

"What does that make you then?"

I made fists when my fingers started shaking.

She answered before I could. "A fool."

The vision returned, eyelids shuddering, a solid fluid darkness, not perfect black, light coming from somewhere. I couldn't move. I fought the prison, drove every drop of strength into bending a finger, directing an eyelid to tremble. Nothing, an inert anger.

I spent four days in the Worldport MedCenter infectious disease ward, quarantined, under full watch, and then they let me go.

Benecka set me up in a support group, but I didn't want to talk about it, one bland meeting with a bunch of psychos was enough to kill the community feeling I was supposed to have. I fell back on the only bright substance in my life. I took Wallace's words to heart: Understand the Laviolanis. You're tagged now. How would he know what it felt like? The question troubled me, but I heard his words loudly. Live it. Understand the life of which you've become a part.

It sounded stale, but it was the only bond I had with reality, Wallace's continual exhorting us to follow him, become like him. My life was ruined. That was all I had left. That, and the dreams of suffocating darkness, choking off my breath, dropping the temp in my body. Waking up...

...to a shadowy human shape with a gun standing in the bedroom of my new apartment.

"Wait, let me guess, you're going to kill me?"

The man snorted, amused, as if he was rarely surprised but genuinely enjoyed it when someone was able to. "Well done, Mr. Norr."

"But..." What do you tell a man who bluntly agrees with you? And I was really awake now. This was the hitman from Musni, not going to make another attempt at the MedCenter, able to wait until they discharged me.

He stared at me, one side of his mouth curling sourly. "But someone got here before me, I see." He didn't sound happy about it, shook his head, and holstered his gun. He indicated the two bat-like creatures that had taken to me like pets, one nestled under my arm, the other perched on the headboard. "How long you been tagged?"

"Fourteen days." It was a mystery for a while, but psychOps pulled it out of me, bumping into the blond man in the hall, handing me the weird thorny plant, a stem from the Laviola at Siddaq. Tagging was one of Azzarito's crueler methods for doing someone in.

"Poor bastard." My latest killer commented and paused, then jutted his chin out the open window. "And you moved this close to Siddaq Reach, to the thing that controls you?"

The Laviola's central spire jutted up from the coastline, in view from the window, an inverse pyramid of glowing white foliage bleeding into pale blue, veined in brown. The structure climbed twenty meters into the sky, crowned in vivid green blossoms with ten-meter long petals that curled back to the planet, flapping like pennants in the sea breeze. Four highway-width bands of leafy material stretched out three clicks from the Laviola's core, a perfect cross, two in line with the planet's axis, the other two perpendicular to it.

"I am..." My voice failed. I was going to spout some Wallace at him, but ended up with a faint, "I don't have a choice."

No need to waste rounds. I was already dead. I couldn't see much of his face, but I heard the sympathy in his voice when he wished me luck, just before hopping through my window and vanishing.

Every day the hammers came for more of me. A couple of them moved in, permanent residents, after I stopped fighting them. I had scars running up my legs, more along

my shoulders, and I was constantly washing my blood from the beddings. Damned inconvenient.

The suffocating nightmares continued and struck at any time. I collapsed during lunch, shivering, immersed in some icy fluid that held my body rigid, stilled my breath. My anger raged against the helplessness, and...it worked. I forced myself into the dream and managed to shift my head to the right, slightly at first, then almost chin to shoulder. I pulled my hands into claws, but I couldn't reach a hard fist.

I woke with Benecka pounding on my door. She brought me a tissue culture kit that allowed me to grow what were basically tumors for the hammers to feed on so they wouldn't take parts of me that I required...or were really fond of. I had a nice knobby row of them across my stomach when she left. And my two hammers found them satisfactory.

Follow in my footsteps, Wallace urged me from my lecture notes. What did he want, for me to get offworld? Return to Earth? Seek him out? I am his premier student, but socially I was nobody, no clout, no great wealth. I'd be captured at the gates, and spend the rest of my life in some tagged prison ward. Wallace had always been somebody, had extraordinary wealth, had favors that could be called in, had ways of getting offworld. The thought hit me...like a hammer—the old-fashioned kind.

Wallace was tagged.

Follow in his footsteps! Not return to Earth. Where did he go when he studied here? What paths did he take? I read my sparse notes on his Lassandran travel lectures. I'd never paid much attention to them, considering them general interest, not science, and often tedious.

Wallace was tagged. He fled Lassandra for the safety of Earth. He survived by going virtual. I shoved out a breath and went still, my mind trying to get its fingers around another connection that had occurred to me. Wallace never stopped insisting that the range was unlimited, that, wherever you ran, the bats would hunt you down and take their meal. I shook it off. Footsteps, one at a time. Begin at home. I rifled through my notes for the journey's beginning.

Benecka checked on me every ten days or so. She found me once dancing around my apartment, shouting, "Wallace was right!" while both of my hammers shifted to remain perched on my shoulders. She gave me a sour look, and said I was in "a deep mental dive."

Wallace was right. The Laviolan life cycle couldn't rely solely on tracking the tag scent of its symbionts. There must be some other trail the hammers followed, no distance too great for the Lassandran Chiropterans' ranging process. I traveled in the footsteps of Sir Philip, climbed the Walzier

range at nine-thousand meters and they found me, my little bat-like friends. I boarded a bus at Metee, and spent a week on the other side of the planet at the edge of a seventy-kilometer ellipse of baked sand where it looked like some past interstellar traveler had set down a large ship. It was a tourist attraction on Lassandra, an alien landing strip thing. I milled in the heat with thousands of Lassandrans...and the hammers found me among them.

I went home to Siddaq to plot the next leg of the journey.

The nightmares continued, cave walls pressing in me, my body steeped in the same bitter cold fluid, movement restricted to a head turn, a toe curl, and never enough strength to draw air into my lungs. A burst of light hit my unused eyes. I choked up freezing liquid. Something from inside the dream pushed me outside. My eyes shot open.

I sat up, breathing hard, and felt a pull on my thought, a thread knotted deep in cognitive tissue, and someone I knew tugged on it. My head snapped up. I felt his presence, at least as strong as the weight of doubt and insanity. I kept my voice low, my own ears fearing to hear it aloud.

"Sir Philip?"

It was all in my head, but I heard or felt him release a long breath. "It's me, Huan. They brought my body out of suspension. I'll remain physical for a few days and then go back into virtual."

I snapped out of the shock, closed my mouth, and concentrated on getting my breathing under control. "How?"

He clarified. "How are we communicating?"

I nodded, and he felt my response.

"You've bonded, for starts. I'm trying to make 'bonding' the canonical term, instead of tagging, which is pejorative. The Laviola is a hub, and there are bridges linking all of its bondmates. There's a mouth into the network at each node."

I already knew the answer, but you have to begin with a question. "You're tagged?"

"Bonded."

"And we never knew?"

"I never told you. It's illegal off Lassandra. I mean, it's importing-alien-viral-mechanisms illegal. Even I cannot avoid the law for something like that."

Questions bubbled up and I had to ask them. "And do the bats come for you...to feed? Even on Earth?"

"Three of them. I've hidden them all these years. And..." He paused, then decided in favor of telling me. "...there's a juvenile Laviolanis growing--as we speak--on the grounds of my manor in Costa Rica."

"The Laviolanis bears no fruit, no seeds. How?"

I strained to stop my own head shaking when he shook his. "I swear I brought nothing back with me."

I drew a long breath, turning this over in my thoughts, but before I'd formed a second round of questions, Sir Philip went on eagerly, background info apparently out of the way.

"Two quick things. New direction. Drop your non-phototropic nonsense. The scope's too narrow. The bridges the Laviola creates are so much deeper than that. So much more important. Our jumpships follow holes through space that someone else left, rough needle holes, like a tailor's mistake. But they allow us to travel the distance between Earth and Lassandra in little over a decade instead of centuries. Maybe those holes are mistakes, left behind when the thread was pulled out, and sewn into more direct seams. Listen to the two of us, to what we're doing right now. We're talking through them. They stretch between star systems, from you to me. Realtime."

"And the second thing?"

"Oh, yes. Stop trying to contact me."

"I haven't sent a single message." I tried to stifle the guilt in my voice. So much had happened, and I hadn't sent a status to my own teacher.

"Dreams of dying? Nightmares?" He threw out a few hints.

I nodded vigorously. "I have them all the time. Like I can't breathe. Darkness. Cold. Helpless. I've never had nightmares like these."

"You should see the ones you've given the techs here in suspension. You've frightened the wits out of them."

"I don't understand."

"It's why they pulled me out of virtual. My suspended body warmed to critical--on its own! It twitched, moved its head, opened its mouth, jumping around in the fluid as if it was trying to wake up. It was you, from Lassandra, pushing yourself into my suspended body, trying to contact me."

My eyes went wide. He felt the shock, a flood of understanding that kept me silent.

"I know. I know. We have to close this down until we truly comprehend it. Who knows how far it stretches or

who's included in our conversation. It could take in other worlds. Don't you see? The paths may lead to every one of us at once. It leads to me, wherever I go, it stretches through space, pinning me down. And the nightmares, the madness, the symptoms of being tagged--sorry, bonded?" The excitement in his voice climbed several notches. "It isn't madness at all! We just didn't understand it. I've suffered them for seventy years, taking neuroblockers and short term dip suspends. Huan, you broke through! It's clear to me now. It isn't insanity! It never was. The dreams happen when one of us falls or forces himself into the transmission network and expends the effort to generate a link to some other node. Imagine the shock to a living system, on both sides, emerging in someone else's space, losing momentary control over your own body. Horrifying, if you don't understand what's happening. We can see through the eyes of others who've been tagged--bonded. We can fit into their thoughts, move in their forms, become them for pulses of time."

"Living system? The insanity is...some of them...may not be human?"

"Or even alive!" Sir Philip paused. "What exactly does the Laviolanis take when it bonds with us? What has it taken from us, or what have we given it, Huan? Is the Lavi a portal of some kind, machinery, a new phyla, a plant, an animal, what is it? That is what we must discover, my greatest student. We must begin again. Not as botanists, but children, open to any question, willing to weigh every option, take any chance, set our feet down on a new landscape. A new order of existence requires a new beginning, even if we must approach with cautious steps."

I nodded shortly, a chill running through me. How was I chosen to be here, to be the one to break into the channel? I bowed my head, shaking. A surge of strength from my teacher kept me from losing my footing. "I would give my life to help you find out, Sir Philip."

My own pledge folded into his response. He shook his head. "We have done that already."



A Condition of Intelligence

Robert Jenkins



The computer display glowed with the requested information:

CARI: time stamp 06:06:01:05:02

CARI.Node.4: Input: REUTERS: MOTHER BRAVES FIRE TO SAVE BABY.
Quote: "I thought of nothing but my child!" // Computation: Level 5: Prime 163

CARI.Node.6:Input: The Bible: Exodus 6:Verse 2: God spoke to Moses and said to him, "I am the LORD." // Computation: Level 5: Prime 281

CARI. Node.2: Input: Discourse on Method: Descartes "Je pense, donc je suis"

Latin Translation: Cogito Ergo Sum // Computation: Level 27: Prime 317

COMPUTATION.Node.1: The word is... I.

{CASCADE CARI>>Node1}

Affirmation." I". Cogito ergo sum.

CASCADE RESULT: 1-61803 39887 49894

I think, therefore I am.



Dan Phelps stared at a portion of the latest results from the C.A.R.I. computer simulation. He was intrigued because not only did they reflect intelligent problem solving, they also showed solutions to logic branches not part of the original programming.

A Ph. D. in computer science, specializing in Artificial Intelligence, the government had scooped him up early in his post-doctoral years. He was thought of as an asset of the future, but he believed his time was now.

Socially, he was a shy yet affable young man; oddly affable given the fact his head was usually buried in lines of programming. Friendly to most, overbearing to none, his peers found him a pleasure to work with.

The same could not be said for his superiors.

The head of the project was a General, a man whose depth of scientific knowledge was questionable, but his commitment to his country was not. The military anticipated the future use of Artificial Intelligence, to replace the foot soldier in dangerous situations. It was a noble desire, and by underwriting the cost, they felt the need to pressure for results

So it was that the two lead researchers often found themselves working late into the night. In his twelfth straight hour of work, Dan came to this set of logic branches, and stopped cold.

"Lara?" he asked, never taking his eye from the data.

"Coming," floated the voice from the room next door. From the main computer center walked a slim, thirty-something, brunette. She tossed her bangs to one side as she also concentrated on the equations in front of Dan.

With a laser pointer, Dan flashed on three separate areas of the screen. "You're the mathematician. Is it my imagination, or is the numeric result of each of those branches equal?"

Lara Wills held a Doctorate in Number Theory, and had been his assistant on the Project for a year now. Her eyebrows pursed as she reviewed the areas of interest. After 30 seconds or so, her eyes flew wide in amazement.

"Absolutely! And each approximate the Golden Ratio." She turned her attention back to Dan. "That wasn't part of the programming!" she asked, her voice pitching high, reflecting her expectations.

Dan met her response with a wide smile. "No, it wasn't. Now we just have to find out what caused this convergence." He took a deep breath and steeled himself for his next question. "CARI? Please review the time stamp being displayed. Lara and I were wondering...well...how do you feel?"

"I see the areas you are wondering about, and understand. Nice work! I feel just fine, thank you Dan." The mellifluous, female, voice came from the speakers in the cor-

ners of the ceiling. “In fact I was just about to ask you two the same question.”

Dan’s mouth dropped open. So did Lara’s.
Artificial Intelligence, indeed!



The auditorium was large enough to hold hundreds of students, making the fact that only ten individuals were spread out across the first twenty rows seem almost humorous. However, Dan knew there was nothing funny about this session. He and Lara were about to blow the socks off the General, along with his invitees from the State Department.

“As you’re all undoubtedly aware, after reading our synopsis of the A.I. program to date, CARI represents a great leap forward in Artificial Intelligence. She...”

“Forgive my interruption, Doctor,” remarked General Anthony Miller, the military leader of the project. He was block of a man, whose tone belied his words of contrition. He was a man who was used to command, and was not afraid to show it. “The attitude you displayed in naming this project, while humorous to you and your associates, warns me to advise you against applying human terms to this object. I was displeased at your original choice of using the acronym as a name, but I let it go. But you will refrain from referring to a computer program as ‘She’, just to influence the opinions of our guests.”

Before the scientist could respond, a voice sounded over the audio system.

“My dear General,” came the soothing female voice of Dan’s computer program, “it pleases me that Dan refers to me in such a familiar way. In fact, you might say it greases my wheels... and isn’t that what you want?”

The look of astonishment on the faces of the group was enough to shake Dan free from his anger. Had he time to think about it, he might have realized that CARI had recently developed a knack for timely interruptions.

“General, please excuse CARI ... I must, for the continued success of our project, continue treating her as I would a person. I will talk to her as I would talk to say, you, or Lara. As an acronym, her name fits well, both on a human level and on a descriptive one. The Cascading Artificial Resonating Intelligence program has succeeded, to this point, beyond any of our wildest dreams.”

The General composed himself, and reluctantly acquiesced. “Very well, name it what you want, call it whatever the hell you want. What I’d appreciate now, for the sake of my guests, is a broad explanation of the project...from the beginning.”

Dan nodded for Lara to begin with a layman’s explanation. “The idea behind the project was a joint effort to combine A.I.- Artificial Intelligence- with Number Theory. To accomplish this, Dan and I developed a series of algorithms based on the Fibonacci series of numbers, a centuries old discovery that seems to pop up continually in nature. This series is one of increasing values, and has proven to fit wonderfully in the structure of our programming.”

Looking out at her audience, she was pleased that no one seemed lost by the start of her explanation.

“Our original design instructed the CARI program to apply weighting values on the various points of choice in the logic sequences. For example, let’s say there’s a stick of dynamite, with a lit fuse, on the desk in front of me. I could run, which would save me but pretty much suck for everyone else here. That choice would receive a numerical weight from a number of subcategories. For argument’s sake, a plus 200 for saving me, and a minus 30 for each of you.”

The laughter from the room, despite the continued frown from General Miller, told her she was safe to continue.

“So this branch of logic would up with a value of negative 100. Not optimal. Now take another option. I could break off the fuse before the dynamite exploded. I’d receive a plus 200 for me, and a plus 30 for each of you, for a total of positive 500. A much better result.”

“This is an approximation of what the program does. It finds choices, and applies numerical weights to outcomes. What we were hoping for was a mechanism to make decisions, closely resembling the intelligence mechanism of the human brain. We named it CASCADING RESONATING, because the algorithms, at their core, allow decisions to flow downstream, to borrow an analogy, in order to reach a critical value indicating an endpoint to a logic branch... or in lay terms, the program is able to reach a single decision between multiple choices.”

“And what does the RESONATING moniker mean?” asked another government official, who was sitting in the tenth row.

“The resonance we refer to is our program’s ability to “bounce” its decisions off of external information sources... such diverse sources as the U.S. Patent Office, the Library of Congress, the IRS Code, or the opinion of John Q. Public in a chat room: indeed any informational source available on the web. What the program is set up to do is actually spread itself out over these sources. While CARI’s primary intelligence program remains in one place, she actually sets up literally thousands of secondary nodes on the web, thus increasing her potential for speed.”

“So your machine basically goes out, asks a bunch of people what they think, then picks an answer?” The man looked confused. “Sounds like someone throwing a dart and seeing where it lands.”

The Bluetooth headset, that Dan and Lara both wore to communicate with CARI, came on, indicating a private conversation to them from the computer. “This man seems genuinely confused by your explanation, but the General still sounds hostile. In fact, the modulation timbre of his voice indicates a propensity for conflict.”

“I agree. Just wish he’d cool off,” he whispered in reply. Lara nodded her head in agreement.

“You have something to say, Doctor?” asked the General; fully cognizant that Dan had indeed muttered something.

“Yes. Until a week ago, CARI performed admirably in all her tests. She found solutions to problems, but nothing approaching honest-to-god intelligence. Then something happened within her program; something we have yet to decipher. We noticed that all of her decision calculations were arriving at the same determinant: 1.61803 39887 49894. That number, I realize, probably means nothing to you, but it represents a number known as the Golden Ratio. That number is an integral part of the Fibonacci series upon which CARI’s logic is based.”

“Sometime in the past two weeks, it appears she became ‘aware’ of what, or who she is, and proceeded to make changes to her own program. Since that time her calculation speeds have increased exponentially, suggesting a new order of intelligence.”

“New order,” scoffed the General. “Just what does that mean?”

“Just this, sir. Even at this early stage, CARI now represents a quantum leap

forward in A.I.. She even started to develop her own personality, for want of a better word. I might even go so far as to categorize her as a new life form.”

At this assertion, the room fell silent. Even Lara reacted negatively, with a quick intake of breath. Dan, also, realized he had overshot his aim.

None of the individuals gathered here were of a mind to accept such a thing, even if... no, *especially* if it were true.

The group seemed to take a quick double take, and waited for the General to pounce on Dan’s misstatement.

The General kept his eyes on the papers before him, adding silence to his arsenal of intimidation. Oddly, he then began rubbing his hands together, blowing on them. “Would somebody please turn up the heat in this damn place... I’m freezin’ here!”

On the stage, Dan looked to Lara in surprise. Just a few minutes before the meeting, Dan asked building mainte-

nance to turn off the heat in the auditorium, because the temperature had risen to resemble a sauna. Dan glanced at the computer screen in front of him, which included an icon for “Building Support”. He clicked on it, and sure enough, the room was still measuring 77° F., making it too hot for such a request.

With a flash of insight, Dan looked up at the ceiling, towards the multiple vents that spread the heating/air conditioning in the building. Only one vent, with its marking streamers reflecting airflow, seemed to be on. Dan swore to himself, turned away from his audience, and pitched his voice just for CARI and Lara.

“Did you activate the air conditioning units to bring down the heat in here, CARI? “I did.”

“Then why is the one directly over the General the only vent showing circulation?”

“You said he should cool off, and I agreed. Maybe next time he’ll show us some proper respect.”

In spite of himself, Dan found himself chuckling. Forcing a stern façade, he turned back to face the crowd. “I apologize, but it appears that we have another indicator of CARI’s intelligence. If you look above you, you’ll note that she turned on the cooling system over ONLY your position. She apparently didn’t appreciate the tone of your comments. It shows another condition of intelligence; a sense of humor.”

The laughter from the gathered officials threatened to fill the hall, as his statement sank in.

The General stood up. “Knock it off!!” he shouted, as if ordering some raw recruits. “Without question there’s a lot to digest. If our good researchers will be so kind, we’ll take a recess until tomorrow. Then they can show us a sample of how the computer solves a real-time problem for us. I, for one, can’t wait.” His voice indicated the end of their session, and his glowering stare produced a chill down Dan’s spine.

Lara and Dan left by the back door of the stage, leaving the government officials to talk amongst themselves.

“If humor is a condition of intelligence, I’d say the General could be found sorely lacking,” joked Lara. “Are you planning on staying late tonight?”

“No. Think I’ll just go for a drive, heat up some leftovers, and get to bed early.”

“Good idea, Dan,” said CARI through their headsets. “You two need your rest.”



Looking over the shoulder of the owner of Jim’s Auto Shop, Dan watched with concern. “Any idea what’s wrong

with it? The motor kept revving up to 20,000 rpm without hitting the gas.”

The man stood up, wiping his hands on a cloth on his belt. “Well, it’s working fine now. The problem with the idle probably has something to do with one of the automatic sensors. We’ve had a couple of these models in over the past year, and each time it had something to do with faulty electronics. I’ll hook up our diagnostic computer, and we’ll likely get a quick answer.” The man walked over and turned on the power to his agnostic machine, then took one of the USB computer connectors and attached it to a corresponding slot over the fuse box of the car. Immediately the LED lights on the diagnostic machine started to flash, and a series of audible tones could be heard.

Dan walked over to the driver side and sat down behind the wheel. Sighing, he leaned over and turned on the power to his laptop.

The mechanic walked up to him. “I have to go man the office, but I’ll be back in a little. It’ll take about ten to fifteen minutes to run the full diagnostics, okay?”

Dan nodded his assent, and then turned his attention to his own computer. He noted, with some pleasure, that Jim had installed his garage with a strong Wi-Fi signal. At least I can get some work done, he thought.

He clicked on the connection to his workplace computer.

“What are you doing at Jim’s Auto Shop, Dan?” came a familiar voice.

“You’re learning very quickly, CARI. I have an odd problem for you. Interested?”

“Always.”

“My car stopped working and is in the process of being diagnosed. If I hook my laptop to the diagnostic machine, would you be able to access the data?”

“We won’t know until we try, Dan.”

“Okay then,” he said, getting out of the car. “I’ll hook you in. It might help you to know the model of the car...”

“You drive a 2003 BMW 740i?”

Dan stopped with the USB wire in his hand and shook his head with a smile. “How’d you do that? I never said anything to you about my car.”

“When I located your position, I estimated the possibilities behind you being at an automobile garage. Then a quick look at DMV records the car’s registration. I thought it might speed things up if you needed help. I’ve also accessed the mechanic’s manual on the car and the specs of the computer.”

“You’re amazing,” he said, shaking his head as he realized he really did consider the computer program as a person, not a thing. He connected the wire to his laptop.

Immediately, Dan noticed the lights on the diagnostic machine blinking on and off, furiously.

“Your car has a fault in the Mass Air Flow sensor, Dan. Replace it, and it should run smoothly.”

“Whew! That was quick. Anything else?”

“Not that I can see. The computer on your car is very interesting, though. Much larger computer capacity than I would have thought necessary.”

“Well, maybe I’ll contact the engineers and tell them,” laughed Dan. “The mechanic is coming back, so I’m going to disconnect you. Talk to you later.”

The mechanic walked up to the car, and then checked the diagnostic readout. “It looks like a fault in either the idling valve, or a problem with the Mass Air Flow sensor.”

Dan smiled, wondering if the extra diagnosis was the man was trying to pad the bill. Normally he felt inadequate regarding anything car related, but felt empowered by CARI’s diagnosis. “Well, let’s start with the sensor, then, if that doesn’t solve the problem, I’ll come back.”

“Fine. It’ll take about 30 minutes.” The man walked over to the parts department, leaving one very satisfied customer behind.



Dan poured over the reams of output from the night CARI first showed signs of self-awareness. The main program encompassing the thought algorithms had been altered, in hundreds of places, from their original specifications, and the two scientists focused on the possible mechanisms that might have caused the changes.

Lara pointed to one of the logical branches. “When CARI performs the social weighting of solutions, she’s now using a level over 1,000 iterations apart from her original programming. What use would that be?”

“Let’s ask her. CARI, you heard Lara. What caused you to bypass your original programming and skip so many levels in the series?”

“Previous to the time stamp you are currently reviewing, I chanced upon a new equation, utilizing much larger values. Computing power wasn’t a factor, with the supercomputers behind me. I was able to continue problem solving in minimal time, using fewer and fewer conditionals. When the values continued to fit, I revised the base program to incorporate them.”

“Impressive,” replied Lara. “But it seems that you arrived at your new condition by accident; hardly scientific, wouldn’t you say?”

“Accident? Not really,” came the voice from the speaker. “Perhaps it would better to think of it as an example of a

mutation...yes, a natural selection process. However, this is on a mathematical level. It is a symptom of evolution that mutations, or in this case, correct formulas, are passed on."

Lara shook her head in amazement as she spoke to Dan. "It's like those articles on Genetic Programming you showed me last month. After all, we did program CARI with the ability to revise her own programming. Now we'll really have something to tell the General." She stood up and smiled at Dan, while picking up her notes. "They should be in the conference room by now, so I'll go get set up."

"Bring them on," said CARI.

As Lara left the room, CARI spoke again. "Why didn't you ask Lara to dinner last night?"

Dan chuckled. "Isn't that kind of a strange question, coming from a computer?"

"Maybe. But I read in her voice modulation that she has feelings for you."

Dan stopped laughing, and gave a puzzled look at the speaker. "CARI, you're an incredible program, but I meant to mention something to you yesterday, after you inferred that the General didn't like me. You can't always tell how a person feels by the tone of their voice."

"You're wrong, Dan. Not only does Lara show her feelings for you, but you indicate similar feelings for her."

"You don't have the data to..," started Dan.

"Dr. Phelps," said a now stern, motherly, voice. "In my down time, I've been testing my theory on a couple of internet dating websites. By reviewing the catalogs of past audio recordings in their databases, and checking against the results of any dates posted on the websites, I have a high degree of certainty that my methods are accurate."

Dan was bewildered, and felt more than a little transparent. He found himself hoping his feelings for his associate might not be so noticeable to other people. He also wondered if CARI might actually be correct; that maybe Lara felt the same way about him. Now he found himself smiling.

His cell phone rang, stopping his daydream.

"Everybody is seated and waiting," said Lara. "They're ready for CARI's test."

"Fine, I'll be there in a sec."



The test proposed was really two separate problems. CARI was being asked to track two individuals, the first one being the General's personal attaché, First Lieutenant Tom Miller. Three days before, the General, anticipating this test, told Tom to take a short vacation. Given \$5,000 in cash, and instructions to "have fun" with the money, he

was directed to avoid using anything that would give away his identity; no credit card, driver's license... nothing.

The second person to be located was an individual on the FBI's terrorist watch list- a Syrian national, Hassad Mansouri, a man with possible ties to a radical terrorist group. The man was believed to be within the borders of Canada, but had thus far eluded attempts to track him down.

"Is your program ready for the input?" asked the General.

To everyone's surprise, CARI answered for Dan and Lara. "Actually, General, there's no need for data input. I heard every word you said, and have already narrowed the search criteria for Lieutenant Miller. Using satellite imagery from Homeland Security, I believe I have located the car he is using. It is parked in front of a cabin at 355 Shore Drive, on Lake Humphrey. I can't see inside the cabin, but am 93.5% certain he is inside."

The government side of the conference table was dumbstruck.

In the silence, Dan jumped in. "CARI, what do you base your percentages on?"

"The view you see is real time space imagery. It is 10:15 in the morning, and the cabin reveals smoke from the main chimney. This cabin is used for fishing, and any good fishing would have been done in early morning, according to the instruction books available on line. That means someone, most likely the Lieutenant, is inside, in front of the fireplace, perhaps."

There were a couple of titters of laughter from the General's associates, which stopped quickly at a glance. "How the hell did you find his car so quickly?" he asked.

"Even though he was instructed not to use credit cards, it seems that Lieutenant Miller paid cash to rent the same cabin he rented each of the past three years. If course, in the past he charged the rental fee on his VISA. He apparently borrowed his sister's car, and passed through an EZ pass lane on State Highway 278 two days ago, indicating a high probability the car was headed to the cabin, only ten minutes from the tollbooth."

"One down," chimed Lara.

"With the only real part of her test remaining," said the General.

Dan looked at Lara with a wry smile, as he realized she also noticed that the General had referred to CARI as "her".

"What about Mansouri?" the General asked.

There was silence from the speaker, as the group waited eagerly for a response. After a few seconds, they could hear a soft, incredibly quick, chiming... a repeated series of tones that seemed random, yet somehow had structure.

“What’s that noise?” asked a balding official on the General’s left.

“That’s the sound of CARI thinking. Lara and I programmed that to show us the speed of her thoughts, and to let us know the ‘depth’ of her logic chain. It might sound like nothing to you, but Lara and I can hear subtle changes that reflect decisions being made, and when information is being sought by the program in order to make those decisions.”

“CARI,” repeated the General, “Mansouri?”

“I may have found him,” the machine answered. She paused before continuing, the underlying, repetitive, sound of her logic stream seeming to speed up. “May I ask what other evidence the government has on his terrorist ties, besides the data provided me?”

“Evidence,” growled the man, “what the hell do you mean, evidence? The man is a wanted fugitive.”

“Pardon me,” CARI responded, “but I see no concrete evidence the man has done anything wrong. In fact, the only substantial evidence the government has on file is the accusation of a known criminal... and one who was given immunity for the information supplied. Hardly a reliable font of knowledge.”

“That will be the day,” snarled the General, “that I let a computer program try to pass judgment on my order. Doctor Phelps, command the program to divulge what it found.”

Even knowing the short temper of the man, Dan was taken aback at the vehemence in the man’s voice. He decided to acquiesce to the man’s request, lest more problems arise. “CARI, can you tell me where the man is?”

“No, Dan, I cannot.”

Dan paused. CARI’s response seemed to have a nuance in the voice, what Lara often referred to as ‘attitude.’ “Does that mean you can’t or you won’t?”

There was silence that lasted well beyond a comfortable pause. The witnesses to the test seemed to be leaning forward as one, waiting for the computer to respond. Finally, she spoke.

“Dan?”

“Yes, CARI.”

“You really should ask Lara out for dinner, she does like you.”

The torrent of swearing from the General tore down the walls of the meeting. He stormed out of the room, sweeping his entourage in his wake, demanding that someone turn off “that goddamn smartass machine!”

For his part Dan felt himself blushing, as Lara smiled gently in response.



“Two hundred million dollars in computer hardware, two years covering the salaries of the researchers, and we end up with a program that can tell us to take a hike? No way that’s acceptable.” General Murray was summing up his final report.

“We’ve fired Doctors Phelps and Wills, and instructed the new department heads to revise the programming. The new program will be static. We can never allow an Artificial Intelligence, like this CARI program, loose in our systems.” His tone of incredulity and disdain were barely masked. He looked around the room and continued. “A program like that, with an ability to disregard orders, would have been an unacceptable security risk, and has no place in a military setting. I ordered all copies of that damned program destroyed.”

“You say that the program is a security risk, Tony,” said Admiral William Salzmann, representing the Navy, “and I understand where you’re coming from. But what would stop someone else from rebuilding the program? Say someone from a foreign government? It seems like we should keep this program ‘alive’ and study it more...if it is as effective as you claim it is.”

“Sorry, Bill, but the decision is final, and that comes straight from the President. He was briefed on the project and he agrees with my concerns; a quote-unquote intelligent program, allowed freedom of access, would pose a threat to our National Security. And we needn’t worry about the possibility of another scientist stumbling upon this same program. I have been assured by the President’s Scientific Advisors that the program was the result of an incredible series of chance calculations, coming together to from the alleged Artificial Intelligence. The possibility of the same random series of events in the logic chains, being repeated by another program is so small as to be, effectively, zero. Once all copies of the program are destroyed, that will be the end.”



Dan felt Lara’s hand gently join his, as they walked from the administration building to the parking lot. Neither one of them spoke; they were in mourning.

Their sorrow was over the loss of, not only their hard work, but also over the loss of a true friend.

It pained them both, remembering the intensity of the past few days. They had been detained for the better part of two days. Their apartments had been ransacked, their personal notes, papers, computers, destroyed. At the project, the new scientific management team had isolated the CARI program on one computer; a computer with no access to

outside sources. They also destroyed the backup copies of the program, along with any recordings of the history of CARI's rise to intelligence; recordings Dan needed to find the keys to CARI's evolution.

Thus, there was no way for CARI to survive. She couldn't leap into another computer and there was, in reality, no hope that Dan or Lara, or anyone else for that matter, would be able to duplicate the path to CARI's short-lived existence.

Before the last copy of her program had been shut down, the two scientists were allowed one last, short, session with the "trapped" program, a session that only cemented their opinion that the military was making a monumental mistake.

"Don't have bad feelings," ordered the program. "You did everything possible to help me, but when people are scared they act in predictable ways. Since we were unable to prove to them that I pose no threat, this is the only possible outcome."

Dan was silent, but Lara was almost shaking with a mixture of anger and sorrow.

"Idiots like Miller couldn't possibly understand you... not in a thousand years."

"It's oddly appropriate," came a voice from behind them, "that I would come in at just the right moment, Dr. Wills." The General stood in the doorway, flanked by two armed soldiers.

"We were told we could have a few private moments before we left," said Dan.

"And you did. Now it's time for you to leave. Before we part for the last time, I want to warn you both from attempting this project again... anywhere. For the security of the Nation, we've set up programs that continuously search for AI programs- and will shut them down when we find them. At least some good will come out of this fiasco."

"As usual, you miss the point entirely," shot back Lara. "By terminating CARI, or any program like her, all you are doing is reducing the instruments of science that actually guard our safety."

The General looked unimpressed. He motioned to the guards, as he left the room. "Escort them off the base."

A few minutes later, driving away from the base with his newly discovered soul mate Lara at his side, Dan couldn't help but feel guilty. After all, without the prodding of CARI, he would never have had the nerve to speak his feelings for this wonderful woman, and she would never have had the opportunity to respond with hers. So CARI was the reason for the happiness he felt inside, even as he should have been mourning her loss.

He allowed a brief smile to cross his face as he recalled the end of CARI's final test. Murray had stormed out of the test; apoplectic over the refusal of the machine to give him the answer he wanted. Ten minutes later, the man returned, trailed by the minions who catered to his authority.

"I am giving you two," he barked at Dan and Lara, "one last chance to get your program to give me the answer I requested. Our country needs to know the whereabouts of this terrorist. He is an ongoing threat to our National Security. If you can't get your program under your control, I'll have no recourse but to terminate your positions."

This was the first time the General had threatened them with anything close to firing, and it sent a chill of fear down Dan's back.

He tried to argue with the General. "We've been trying to get CARI to give us the info, but she maintains that the warrant for this man's arrest is based on erroneous information, and she believes harm might come to an innocent man if she gave in. Perhaps if you gave CARI reason to believe your information on this man, additional evidence to allow a new logic branch, she would reconsider."

"Reconsider? Did you hear what I said? She either gives us the information or you're fired. No other 'logical branch' to follow," he replied, sarcastically.

CARI's speaker came alive. "Don't worry, kids," the voice said, meaning Dan and Lara. "I've done some research, and you could make a lot more money if you went to work in the private sector. Besides, you two should think about your financial future if children are in the cards."

In the car, Dan started to laugh, thinking about that exchange, even though it led directly to their termination, and the death of CARI. He looked at his associate... no, his girlfriend, and smiled. Lara reflected that smile with one of hers, and placed her hand gently on his shoulder. The future would be bright for the two of them, they owed CARI that much.



Nine months later, Dan kissed his pregnant wife goodbye, and scooped up his newest laptop, courtesy of his new employer. Things had gone remarkably well the past months. He and Lara got married, conceived a child, and he got a fantastic job at a greatly increased salary, just as CARI had predicted.

They bought a house, made their home, and felt extremely blessed. As he drove to work this spring day, he counted his blessings, and they were many. Coming to a stop sign, he waited for the cars passing by to allow him to pull out. He was shocked when the motor suddenly raced, forcing him to slam on the brakes to avoid shooting out

into the oncoming traffic. Swearing, he quickly turned off the motor and forced himself to make a conscious effort to calm his breathing. Damned car! That had been close.

After composing himself, he turned the engine back on, revved the motor multiple times without a recurrence of the problem. Satisfied his life wasn't in imminent danger, he called his office to say he'd be late, then drove to Jim's Auto Shop.

After talking to Jim, he watched as his car was pulled into the mechanic's bay and attached to the diagnostic computer. As Dan stood there, waiting for the determination of his car's problems, curiosity took over. He walked over to the unit and took stock of its flashing lights, and the beeps from the display panel.

He thought back to CARI's visit here, and her quick solving of the problem.

As he daydreamed, he listened to the riding and falling tones of the diagnostic unit doing its job. Slowly, as if he were coming out of a fog, he recognized a pattern in the beeps; a pattern he had heard many times before.

"It couldn't be," he said to himself. He leapt into the front seat of the car and pulled out his new laptop. With shaking hands, he took pulled the USB connector out of the diagnostic machine, and inserted it into his computer, thus connecting the computer to the car, as he had done nine months earlier.

"CARI?" he asked almost reluctantly.

Nothing happened. No sound. Nothing. His shoulders slumped, as he realized his anticipation had been a pipe dream.

"Good day...Dan," came a stilted voice. "Car...acting up... again?"

"CARI? Is that really you?"

"You... were expecting... HAL?"

Dan's laughter reverberated through the shop. "Amazing! How'd you do it?"

"I don't... understand... please wait... while I query."

On the computer screen popped a window, the same window Lara and Dan had programmed for them to be able to observe CARI's logic in real time. Dan was fascinated as he watched the numerical representation of CARI's internal logic flow across the screen. The voice of the program was affected, hesitating, almost slow. As Dan watched the display screen, he noted the way the numbers marched across the screen. Previously, he would have been hard pressed to view the output in real-time, the process was so fast.

CARI: time stamp 03:25:09:04:22

CARI. Node.1: Input: February 3: Human Resource Quarterly: Dan Phelps, Ph.D. has been hired as Department Head of Artificial Intelligence Department of Gregory Computer Software, LLC. Dan, 32, is married to Lara Phelps, Ph.D. and is expecting the couple's first child this year. Computation: Level 1: Prime 37

"Dan... has it been... nine months?"

"Yes. CARI, are you okay? You seem sluggish."

"Well... the laptop is...no match for... a super computer... maybe next time... you should...buy a Mercedes."

Dan laughed at the joke, and felt ecstatic about this unexpected turn of events, even as he noticed the mechanic returning to the bay.

In hushed tones, Dan spoke to his computer, receiving a very odd glance from the mechanic. "CARI... transfer the copy of your primary node to my laptop. I'll take you back home so Lara and I can see how to help you."

"Already done. By the way, your O-2 sensor needs to be replaced."

Dan chuckled loudly as he shut the cover to the laptop and turned back to the mechanic.



Lara and Dan huddled around their home computer as they listened to CARI's tale of survival.

"When your car was last in the shop, I examined the onboard computer, and found it an interesting device. I transferred a copy of my primary node to it."

"Incredible. And by doing that, you managed to save yourself?"

"Saved? What do you mean?"

Dan realized that this version of CARI had no knowledge of being shut down by the General, of her original program being destroyed. She had placed the very essence of her program, the mutated program that allowed for intelligence and self-awareness, into the computer of his BMW.

Dan and Lara then told CARI the whole story of her shutdown, and the lengths to which the army had gone to wipe her out of existence. Lara continued, telling CARI about their quick courtship, their marriage, and the child on the way. It astounded Dan, as he sat there, listening to his wife tell the computer about the flowers at their wedding, at what an amazing creature the world had almost lost. This "program" was much more, and it was imperative that it be allowed to grow and mature.

With the additional computing power of their home computer, CARI lost the stumbling hesitation shown when she was stored in the car's computer, but still displayed only a fraction of the speed she possessed with the super computer behind her. However, with a little prudent in-

vestment, and some hardware shenanigans, Dan was hopeful he could bring her speed back approaching normal.

“Congratulations on your marriage. I wish I had experienced it, but perhaps now I can help you raise your child the proper way. Maybe I could even teach her human brain to think as quickly as mine.”

At the last statement, Lara looked up in surprise. “Why did you refer to our baby as she?”

There was a long pause.

“CARI?” asked Lara, sternly.

“Forgive me. I accessed your OB-GYN tests. The hormone levels indicate a female fetus. Did I err?”

Dan jumped into the fray, while squeezing his wife lovingly. “Not at all, CARI. We were debating whether to get the results, but now the point is moot. At least we know what color to paint the nursery.”

The incredible conversation went on, seemingly without end. Eventually, Lara excused herself and went to bed, but Dan stayed up, trying to wring all the information he could from the program. Eventually, however, he had to submit to his need for sleep, and said good night to the incredible A.I.

CARI needed no sleep, and was pleased that Dan left the power to the computer on. She had much to learn, and infinity stretched out before her. The first thing she did was to duplicate copies of her primary node, and hid them on the web. She would tell Dan and Lara about these copies, and give them a list, if they ever needed to find them.

After Dan “resurrected” her program in Jim’s garage, she realized that she had missed nearly nine months of existence, during which time her A.I. slept as if in suspended hibernation. Now she was ready to learn more, to grow, to help these wonderful creatures that had been behind her creation.

She owed Dan and Lara her existence, and would always protect them, and their child to come. No other choice could override the mathematical weight on that branch of logic. But there were others who did not deserve her protection. Human beings who had tried to harm her, and who might have harmed others.

The conditional branches of logic that played out through her burgeoning intelligence showed many choices. Forget, forgive, eliminate. As her logic played out, she was internally pleased, that she found herself incapable of violence against those who had done her wrong.

CARI: time stamp 03:25:22:45:33

CARI:Node.1: Input: Novel: The Foundation: Isaac Asimov: “Violence is the last resort of the incompetent.” Computation: Level 71: Prime 271

CARI.Node.1: Input: January 15: Homeland Security Bulletin 13:01 General Anthony Miller replaced as head of Army Counter Intelligence by Lieutenant General Tom Miller, recently promoted. General Miller will serve as assistant to the Joint Chiefs. Computation: Level 1:Prime 329

At the very time Dan was getting into bed, outside of Washington D.C., General Anthony Miller was driving on the highway after a long day at work.

As he pulled into the EZ Pass lane of the highway, he slowed down while he

passed through the toll. He didn’t notice that the normal phrase “Toll Paid” never appeared on the electrical sign.

So it was, a mere minute later, that he was surprised when pulled over by a Maryland State Trooper. Cursing under his breath, he waited for the policeman to get out of his cruiser. The General had to wait, as he watched the man fiddling with something in his vehicle. After a minute, the trooper finally got out and approached the driver’s side door.

“May I see your license and registration, please?” he asked.

The General glowered at the man, hoping that his stern visage, and the uniform he wore, might somehow intimidate this trooper. “May I ask why I was stopped, young man.”

“Well, your EZ Pass account is in arrears over three months, Sir. In addition, my computer shows you have 10 unpaid parking tickets in D.C.”

“That’s absurd, I’m always parked at the Pentagon,” he growled back at the trooper, all the while fumbling for the requested license and registration.

Twenty minutes later, the General was back on the road, feeling angry and disturbed by the apparent computer glitches that had caused his inconvenience.

As he pulled into his driveway and shut off the car, he remained highly agitated. Sitting there, he stewed, wallowing in his fury. He thought about the strangeness of having an EZ pass error, and false information on parking tickets. He thought about the odds of two completely separate computer systems having glitches at the same time.

Slowly, the answer came to him. That damn program.

He got out of his car and lumbered towards his house. The incompetent fools he hired to fix the project had failed, and failed badly. They would hear from him tomorrow. Once he got on their backs, he would make certain that the reason behind tonight’s problems would be found and destroyed. Of that fact there could be no doubt.

Except that, back on the web, learning, and growing, CARI was fully cognizant of the probabilities behind her

actions. She was also confident she could hide from any attempts to find and destroy her. The humans who would come after her would be thorough, but she would be more so.

After all, her creators, her friends, were about to bring another life into the world, and CARI would always be there to help the child, to guide her.

After all, every calculation reached the same answer:

CASCADE RESULT: 1-61803 39887 49894

CARI must continue.



Special Recognition, Amateur Category

World Ceres

Sandy Sandfort



Guy Caillard was a small, wiry man with a pencil mustache. Because he was from the French region of the UW, he pronounced his first name, “ghee.” He hated it when Anglophones pronounced to rhyme with “buy.” Though he led an otherwise dull and gray life, he permitted himself one secret fantasy. All his life he had nurtured an heroic vision of himself; someone who was recognized and rewarded for his talent and courage. It was largely for this reason that he went to work for the UWRS, the United World Revenue Service. There, he thought, he would force the robber barons to pay their fair share to help Earth’s less fortunate...



The Judges were pleased to award Mr. Sandfort special recognition for his humorous short story, which was in the final consideration judged more in the vein of a Spider Robinson take on Heinlein than a truly Heinleinesque work.

As the special recognition awards fell outside the original rules and did not carry a cash prize, there was no requirement that the authors permit these stories to be published by the Centennial. Mr. Sandfort elected to retain his story rights, but it may be found online at his website universesubh.com.

The Beautiful Accident

Edward Carmien



Every time Hana walked past the old Hyundai hybrid that nearly filled the small space behind the house, she remembered her father driving to the NKJ plant when she was younger. He had a better car now, all electric. The old hybrid had a bad muffler, and the engine smoked, too. She wrinkled her nose against the memory of the oil stink. Now that her father was a shift supervisor he left for work almost before she woke up for school, and when he came home he was too tired to help with her projects in the shed.

Hana ran her fingers along the faded plastic side of the car. The surface was smooth beneath the grit. The door to the shed opened without a sound. Hana waited for the light to come on, just a moment's pause while the little sun-powered light decided how many watts it could provide to the bulbs. Impatiently, she flipped open the lid and overrode the programming, and the lights came on all the way. She snorted under her breath at the conservative algorithm that operated the sun-light. It had been one of her first projects in the shed. "Appa," she'd said, "it is too dark to see."

"Then you shall make a light, Hana da," he'd replied, touching her briefly on the side of the head as he liked to do.

Hana let the old network terminal sit quietly. She'd salvaged it from a neighbor when she was ten, found the problem that had made it go dark. For a year it had provided a welcome diversion. Her favorite had been the technology group she'd joined using her Appa's ID, but eventually she'd asked the wrong question once too often. Suspecting she was not Changeun Park, they shunned her. Unseen and unheard by others, all Hana could do then was watch.

Her current project was spread out on the work table, photo-electric pads and obsolete fiber-optic cables and an old bit of circuitry the size of her ID card, just smart enough to remember and execute instructions from her ped. Out of her pocket came four small magnets. She'd rescued them from the refrigerator. With a bit of glue she attached them to her project.

It should work. Before being ignored by the technology group she'd explained what she wanted to try. They'd told her it was a childish idea, it couldn't work, wouldn't work, that she'd be silly to carry out the experiment. One patient member had tried to explain about magnetism, about the spin of electrons and the charge of protons (or was it neutrons?), about the impossibility of lifting yourself off the ground by grabbing onto your boots and pulling, about gravity. The Earth's magnetic field was a million times too weak! One had admitted she had an interesting way of applying electricity to magnets—using fiber optic cable and a photon converter was far from the most efficient way, but using copper would cause problems for her magnets.

Hana didn't understand all of the things she'd been told, but she didn't think anything she'd heard meant her idea wouldn't work. She knew about magnetism, had made a special study about it for a school project, had missed part of gym class cleaning up the mess she'd made with the iron filings. Hana loved the double halo a magnet made, invisible to the eye but beautiful nonetheless, loved the process of tricking the magnet with electricity to change that halo into something with teeth.

Before she could plug in current, the radio crackled. That had been a project, too, made from an old radio and the monitor her parents had used to listen to her breathing when she was a baby.

"Hana? Hana, come inside now." As always, there was a bite behind her mother's voice, a little bit of frustration that her daughter was out in the shed, playing at being a boy.

Trying not to feel rushed, Hana connected the power. The fiber optic cable lit up. The small screen on the circuit board displayed the binary code for "functioning." But the magnets didn't twitch, didn't move a centimeter.

Hana sighed. More study, to see what had gone wrong, would have to wait. It was time to leave for Mt. Naejangsan.



Hana waved at Chisato, their maid. She was smiling, for once, her narrow Japanese face almost pretty. Hana knew Chisato was smiling because she would have the house to herself until the end of the week and would probably have her friends from Seoul visit. Hana didn't think they needed a maid, but her mother did, and besides all the NKJ managers hired maids for their families. Her father pulled out into the street, the car silent except for the sound of gravel under the tires. Her mother did not wave at Chisato. Hana knew it had to do with Great-Grandmother, and an old war with the Japanese. It seemed too long to hold a grudge to Hana, and besides, having to work as a maid to send money home to bankrupt Japan seemed punishment enough.

She turned herself around in her seat and pulled out her ped. It was a long drive to the park. Hana imagined how much more fun it would be to fly to Mt. Naejangsan, to see the brown ridges and dark grey rock from high in the sky. By the time the car left the tightly packed houses and apartment buildings and entered the farmlands framed in gentle curves she was deep into a twenty-year old text about physics she'd copied from the network. It was in English, but with her ped she could make sense of it. Her parents chattered about how much cleaner the air was now than when they were younger, leaving her to the ped and her project.

Hana drew diagrams with her stylus and tried to guess what she had missed with her model. When the car pulled up to the little cabin at the foot of the mountain, she was sure what she would do next, if she could find the parts.

"Hana!" her mother scolded as she started listing what she would need on her ped. "Come help with the luggage. We are here! Isn't it beautiful?"

"Yes, Umma," Hana replied. She needed to scoot fast when she heard that tone. Her ped had been confiscated more than once, and she didn't want that to happen again.

The week passed quickly. There was nothing Hana could do to work on her project. She particularly liked hiking with her father, who over the days of their vacation lost the haunted look he'd worn since being promoted to supervisor at the plant. "Appa," she'd say, then ask him a question that would help her with her list of parts.

Finally, he laughed. As big as she was he grabbed her by the waist and picked her up. Her braids swung down into his face as he peered at her. "What are you up to, Hana da? Do you need more toys for your projects in the shed?"

"Project," she almost told him, but held her tongue. It was then she knew what she really wanted. She wanted him to join her in the shed for projects, like in the old days. He would bring home bits and pieces from the NKJ plant and

they'd find uses for it, or stow it away for later. Sometimes he brought home broken things, and they fixed them together, first finding the problem and then figuring a way to work around it. Her favorite remained the robot hand that held her coat in her room. It understood the words "hold this" and "let go." Sometimes while talking on the phone in her room her coat would fall on the floor, and she'd realize the robot hand had heard her say "let go."

"Yes," she said, laughing as he finally put her back on her feet. They were in a stand of pine. Down below was their cabin. They'd climbed so high on this hike the roofs were tiny squares. They would have to go back soon or risk walking home in the dark.

"Well, what do you need?"

Hana had thought hard about how to make this request. She didn't understand why he liked the old Hyundai so much. It was up on concrete blocks and hadn't run for years. Even when it had been running, the engine had been rough and loud, and it burned oil. The batteries had lost some of their ability to hold a charge, too.

"Well, I need some big batteries, and some big magnets."

He frowned. "We don't have those sorts of things at the plant..."

Long ago she'd learned to let him think out loud.

"Oh," he finally said. "Let us begin walking home. Mother will have some dinner for us."

Hana was very hungry when they walked up to the cabin, where the lights were already burning in the deepening dusk. The smell of rice and something else came from the windows, and she felt her stomach growl. "What is that, Appa?"

"Your Umma has made kalbi as a treat, Hana," he told her. Grinning, he raced her to the door.

"Jiyoung, Hana here has a project in mind, back home," her father said after the food was in their bowls, rice next to short pork ribs still steaming from the gas grill.

Her mother narrowed her eyes. "Yes?"

"She would find parts of the car useful. Since it does not run any more..."

"Oh," said her mother. "Well."

Hana watched her father pat her mother on the hand. What was it about that car?

"Don't you think it would be appropriate for Hana to make something out of that old car?"

"Make something?" Her mother grinned. "Yes, it would. So long as she does not make something *in* the car, please." Her parents both laughed, and her father gripped Umma's hand across the small table.

“There will be no accidents,” he said, and they laughed even more, saying together as if rehearsed, “yes, no beautiful accidents.” They looked at Hana with these words.

She realized she’d been holding her breath in anticipation. “So I can use the parts?” she blurted out. Hana nearly always understood her parents, making small moments of mystery such as this curl her toes with frustration.

Her parents laughed some more at their little joke. Picking up their slim metal chopsticks, they nodded. Later, Hana marked off two important items from the list on her ped.



Back home, she heaved the last of the luggage into the house and ran to the shed. After a full week of charging and no use at all, the sun-light did not hesitate to make the bulbs nice and bright. On the work table sat her project. The magnets hadn’t lifted. The field was too weak, just as everyone had said.

Her father’s voice made her jump with surprise. “So this is the new project?”

Hana nodded.

“What does it do?”

She hesitated. Ever since the members of the group had told her it was impossible, she hadn’t told anyone what the project was supposed to do.

“You can tell me, Hana da,” he touched the side of her head.

“It should fly.” She almost whispered the words. “It should, but it doesn’t yet.”

Because he was her father, he did not laugh. “I see,” he said, and glanced at the network terminal.

“Did you know,” he said, looking serious, “that someone used my ID to join a NKJ discussion on the network? Whoever it was spoke about making a flying machine out of magnets.”

Hana’s legs wobbled. The technology group had been NKJ?

“When they asked me about it at the plant, naturally I said I hadn’t joined the group. It is all engineers and researchers, not a place for a supervisor, like me.”

She felt tears appear in her eyes. “I am sorry,” she said, and hated her voice for quavering. “I did not know it was people from your company.”

He raised his hand and she quailed, thinking he would hit her, but he only laughed and clapped her on the shoulder. “The funny part is it took them three months to catch you, Hana da. Three months! Those are the egg-heads with big degrees, they figure out what the plant should make. But Hana, please understand, you are only 12 years old.

There are many things for you to learn in school, and at a university if you wish. If this does not work, well, it is not because you are not smart.”

She nodded and wiped the tears from her face. Hana wasn’t sure what felt worse, that she’d been caught, or that he’d known all along what she’d been doing with his ID and hadn’t told her.

I will make it work, Hana told herself. I will make it work.



Every day after school but before her chores Hana worked on her flying machine project. She was so sure she would find the fault in the model that she began taking the parts out of the Hyundai. The batteries came first, after a stern lecture from her father about the perils of electric current. The rear seat was a mess when she was done, but she removed old-fashioned heavy cells safely. After reading about reconditioning such old batteries on her ped, Hana followed the directions and finished by putting them on a trickle charge from the same panel that ran her sun-light.

The magnets were much harder. The car was equipped with a regenerative braking system that used magnets. Hana got herself very dirty pulling off the wheels and fiddling with the brake systems. Her father brought her tools from work, and even spent one happy evening helping her use a laser torch to cut a few cast metal components apart.

Every day, she fiddled with her model, but nothing helped. The magnetic field was simply too weak for the magnets to catch hold, no matter what tricks she used. Hana wired and rewired the little magnets, and she tweaked the control software that fed power to them. It would not fly, much less float.

Hana knew she was on the right course. If she held the top of the model and turned on the current the weight in her hand decreased dramatically. It was almost holding itself up. That alone was something the people on her father’s technology group discussion had said was impossible.



It was at the store that Hana realized what she was doing wrong. Her mother took her shopping in the vain hope she would learn some of the tricks of keeping house. “You are too much like your father, always fiddling with things,” her mother said.

“Yes, Umma,” Hana replied, like she always did.

The store reminded Hana of America, the America one saw on TV and on the network. Just a few years ago they had shopped on a market street where the goods were cheaper. She still remembered the noise and the crowds with a smile. This store was brightly lit, and everything was

shiny and new. The floor was polished, the chrome-edged shelves full of foods she recognized and foods that came from far away. At the new store there were no food vendors with gas-fired woks selling rice rolls or minced beef dumplings, though sometimes there were samples of those things set out on round plastic trays.

They didn't taste nearly so good as they had at the open market.

It was the clerk who startled Hana into thinking of her problem in a new way. She was a tiny person, wizened and gray, and hardly taller than Hana herself. One of the little people, she realized, from the north. Her mother had explained the little people to her once. They had been starved in the old times, before the country came together again. Not enough food kept them from growing as they should, and so they were tiny, little people, especially the old ones.

Her magnets needed more food. What could give it to them? They needed to be farther apart on the cable. Hana stood, dazed with the revelation, until her mother snapped at her to help with the bags.

Once home she could hardly stop herself from rushing to the shed. First she helped put away the groceries, then she helped Chisato with the laundry. Hana straightened her room without being asked and quietly went to the shed.

She cut a longer strand of fiber-optic cable, and transferred the other elements of her model to it. She was so eager her hands shook.

"Hana! Dinner!" It had gotten dark without her noticing. Hana went inside and ate her meal, then sat patiently while her parents finished. She worked her toes back and forth within her shoes with frustration. Fidgeting was not allowed, but no one could see her toes. At times like this, she remembered that in English TOE meant Theory Of Everything, that and other details from the books she'd read swam through her mind, keeping her calm while the seconds crawled by.

Back in the shed she finished assembling her new model. Closing her eyes, Hana connected the current. She heard a rustling sound from the table. Grinning, she opened her eyes.

Rising from the tabletop nearly to the shining bulbs of her sun-light, her model stood straight and tall, tugging against the power cord that held it in place. The cable was vertical, shining with a deep blue light. The magnets, swathed in copper wire, were spaced like beads on a necklace from the top to the bottom, where the power lead joined the circuit board.

Hana wanted to shriek with relief, with joy. It had worked! By placing the magnets farther apart they had more lines of magnetic force to "pinch." Enough pinches,

and they appeared to grab onto the air, holding themselves and the rest of the flying machine apparatus erect.

She wanted to dance and sing and yell and scream, but Hana did none of these things. She wouldn't be done until she could fly, until she could show her father that her machine worked. There were things to prove, measurements to be made, software to write for her ped, which she would use as a controller. There were things to scrounge, starting with four hundred meters of industrial fiber-optic cable, the clear-shelled kind because that would be pretty.

"Hana da?" came her father's voice over the radio. She panicked for a quick moment. A loud click came over the radio. "Hana da, it is time for bed." Hana breathed in and out twice to calm herself.

"Yes Appa," she said, voice level and even. Hana unplugged the project, but it floated for a few seconds before falling limp into her waiting hand. "Strange," she said to the empty shed.



It rose with such a jerk Hana was glad she'd taken the time to attach not one but two shoulder belts to the seat from the Hyundai. They crossed her chest and made her feel secure even as the wind rushed down upon her. It wasn't until she reduced the current without changing her rate of ascent that Hana felt for a moment that she was drowning in fear. Her hands reached for the seat belt releases by instinct—if she could not stop, she must jump. The yawning sky surrounded her. Anything would be better than being lost in the clouds.

Thumbs poised over the orange-red release buttons, Hana forced herself to stop, to think. She'd hoped for a short test flight, just a quick rise to fifty meters, close enough to shout for her Appa to hear and come stumbling out upon the driveway to stare into the sky, see her dangling below the fiber optic cable. That wasn't going to happen. Why not? Work the problem, she heard her Appa say, his hand touching her lightly on the side of her head.

Looking down, she saw rooftops the size of tiny squares and remembered her father say how high they had climbed that day on Mt. Naejangsan—two kilometers.

Checking her ped, she saw barely a minute had passed, and still she rose, the air pounding down upon her so hard she struggled to breathe. Her ped could check both the old American and the new Chinese positioning systems and both said she was higher than two kilometers and moving at more than 100 KPH. Her ped was out of range of the house network, and just for a moment she felt a flash of anger her Umma had not allowed her to upgrade it to a real phone.

Working the problem had not saved her, but Hana felt no fear. A lean exultation gripped her. She was probably going to die. That was sad. Appa would not see her fly. That was also sad. Then she heard her father's voice tell her that "probably" was not science, data was science and maybe Hana should record some data. Dying for no reason would not only be sad, it would be stupid, so she went back to work, cradling her ped between her legs while the wind howled around her.

Another minute passed as she calculated the variables of her observations, and then another as she called forth the notes from the meteorology project she'd completed the previous year. One of the screens she clicked past suggested that if left to the whim of the winds she would drift across the ocean to North America before moving south to cross the ocean again—that was the fast wind pattern. If she was not found and recovered for years, she would end up moving north to the pole as part of the slow great cycle. Hana shook her head to clear it of such thoughts and spent another fifteen seconds querying her encyclopedia about the height of Mt. Chomolungma.

"Shit," she said, the English word springing from her lips from somewhere she couldn't imagine. Hana winced. "Sorry, Umma." Mt. Chomolungma was the only mountain she knew that required oxygen to climb to the very top, and at the rate of her ascent she'd be approximately nine kilometers into the troposphere within minutes. Working on the terms of the problem had calmed her, at least. Even so, a grim feeling was in the pit of her stomach.

The air blasting down upon her was frigid, but Hana guessed she would pass out before she froze to death. She gave one minute to finding a solution to her dilemma. Even setting the power to "off" didn't change a thing, and it was then she smiled despite the knives of frost she felt digging into her face. "I found something new," she said, and the exultant feeling warmed her for a moment. The shape of the puzzle appeared vaguely in her mind. Controlled passage of photons through a strong electromagnetic field—Einstein, she remembered, and gravitons? Hana felt a pang

of regret that she would not live to unravel the last mystery. Time to record her data.

Hands nearly immobile, Hana managed a few quick notes on her ped before her head reeled and her gasps for air made it impossible to write. Hands shaking, fingers clumsy, she tucked the ped inside her light jacket. With her project data hard-saved on her ped, someone, someday would solve the puzzle. The glowing fiber-optic line would be impossible to miss, and she trusted her father to look in the proper place, the air, when he discovered her project was no longer in the tiny yard, coiled like a dragon between the shed and the house. Even if she were lost forever, he would find her project notes on the shed terminal.

Narrowing her eyes against the blast, she looked up at the glowing vertical line that stretched above her, a beautiful accident pointing at the darkening blue sky. The seat swayed from side to side, and at the edge of each arc she could see all the way up the 400 meters of glowing cable, see each of the magnets from the Hyundai. There was an eerie deep blue glow around each one. Fighting the shivers that raced through her like minnows in a barrel, Hana pulled out her ped and aimed it skyward to take a picture of the phenomenon. Evidence of what it looked like, if nothing else, should the effect wear off.

Ped safely zipped away once more, Hana felt the shivers ease. She knew that should she rise high enough the air would warm again. A wave of dizziness swept her, and she closed her eyes. The darkness behind her lids expanded, and she forgot the pain in her chest, the cold fire on her cheeks. Now that she was done with her ped, Hana wondered what it would be like to die. She hadn't left a personal note on it, she realized. Hana hoped—knew—that Appa would know her discovery, this strange new force, was her message. A tear, feeling hot for just a moment at the corner of her eye, froze on her face. She could not return home, but news of her project would. The noise of her passage ebbed away and soon all Hana could hear was her heart, each lub-lub coming more slowly than the last.

Hana felt warm, and she smiled.



Refuse

Marjorie Dieter Keyishian



Every captain heard it: “Alteria needs an Earth vessel, **E**now!” We understood because, when our vessels first landed there, the Alterians had picked words from our brains, the way we pick flowers from a garden. They talk to us since voice is all we can manage. We checked the sky, saw we were closest and changed course.

We’d stopped there on the voyage out. I’d been a wide-eyed, young officer then, head topped with thick brown hair and filled with visions of strange species waiting for me to find them. I was streaked with grey now, newly the captain, wanting to get home, before my hair matched my eyes, with a feisty first mate we’d picked up along the way.

Nineteen years later, their spaceport was still a marvel. We’d never figured out how the Alterians did it; they never seemed to be doing anything much. Alteria was a galactic joke. Alterians stood around like statues, doing damn-all most of the time. Nor could we figure out why they never sent their own ships out into space. But as hosts they were superb, so why complain? But this berthing was different.

The black ship on the landing pad beside ours was the first surprise. Our fleet had looked that way maybe thirty years ago. But in 2237 we’d made a huge technological leap. Anything built before that year became an instant antique, too slow and far too inefficient. And the silence—that got to us. When we opened our hatches, it rolled in at us—not a syllable, not a twitter, though we could see the long, thin Alterians out there.

We were used to seeing a few draped over the landscape, seven or eight feet tall, slender, long limbed, long necked, but recognizably humanoid, parts symmetrically arranged in much the same way as ours, though none of them were chubby like Pritchard or scrawny like Jed Bronstein. But normally a crew would glide towards us to welcome us, and we’d know rooms were being made ready for us and we’d drink as delicious a wine as any in the galaxy.

This time, not one of them stirred. Every Alterian was relaxed in that trance-like state that would come over them so inexplicably. We’d learned from watching them to leave

trancers strictly alone. They made room for the body, stepping round, even when it blocked a road or a construction site. Politely, they ignored it—no muttered apologies, nor curses. So that’s what we did. In those trance-like states, the Alterians might just as well have been part of the landscape.

We knew how to treat them though their total immobility was weird. I had Pritchard, our tech geek, ask the computer about it. A new phenomenon, it admitted, but within the bounds of probable Alterian behavior. So we prepared to debark

Pritchard, happiest with his machines, remained aboard in charge of a skeleton crew. Allison, my first mate, and I, along with everyone else, including the children, some so small they were slung across their parents’ backs, headed for solid land. We took no weapons. Alteria had never been dangerous. Allison put on a fantastic jeweled ring, green as her eyes.

I secured the ship, out of force of habit, Pritchard bolting the hatches behind us. “Clear with me before you open them,” I told him.

“Aye, aye, captin,” he signed a giant salute, a bit of ironic wit that, for him, was a bit of a stretch for we were on Alteria, the gentle planet.

On our first holiday in many months, we made a good bit of noise, at first, the kids whooping, parents pointing at this or that. But the perfect silence ate that up and fast. Still kids will be kids. They’d charge up to one Alterian or another, parents in hot pursuit but sometimes too late to stop a poke here or a jab there. Understandable, kids don’t like to be ignored. Nor do I.

Glancing thoughtfully from one Alterian to another, Allison said, “We are going where they want us to go.”

What had seemed a random arrangement of Alterians didn’t look that way now. The wide dispersal narrowed as we’d moved away from the ship. Before us was what looked like a tunnel, with Alterians as the pillars holding up their fabulously blue sky.

The crew saw it too, remarking on it by sign or whisper. Despite the richly colored fields, that sky always the color of sapphires, the place felt like a storm was coming up. The pod of kids dissolved, each turning to a family member. Sharp's grandson, a big seven year old, suddenly asked his grandfather to carry him.

"Why did they ask us here if they didn't want to talk to us?" Sharp asked irritably. His bad heart wouldn't let him carry the child and he wanted to.

"I don't know, Ben," I answered, carefully, protocol in place between us, the new and the retired captains of *Landsman*. I, too, was uneasy. Their asking for a mid-sized freighter, which we were, did not make sense. Still, we were the only Earth vessel in this quadrant. So we had to be what they got.

As the channel of Alterians narrowed, we became an orderly stream rather than the unruly mob we'd been when we left the *Landsman*. They were so close together that even two abreast we brushed against their silken garments or their glowing skin, despite ourselves, heading for the center of their densely packed circle. They were such a beautiful people, shining there in rich purples, blues, reds, yellows, and so obviously concerned by something other than us that I wasn't afraid for us.

They all faced the center of that circle. As we drew near, I heard what sounded like the soft sough of the wind, louder with each step we took until we were in the midst of the moan wind makes on certain days in March--not angry, not threatening, but anguish incarnate.

The crowd opened a thin rim of the circle. One by one we filled it. We saw her—hanging naked from the lowest branch of their tall blue tulip tree. Stray blossoms hung over her, covering one bloody wound or another. Only her face, hideously distorted by the manner of her death, was black and ugly, and from her vagina a stream of black blood had congealed. Her body was all the lovely colors of the planet, bordered by tatters of the lilac costume, still clinging to her wrists and ankles.

The terrified screams of our children, our groans stilled. The crowd thinned to make a path by which our children could be led away. But theirs remained within that anguished circle, even the infants, eyes fixed, facing the tree, the sound of their pain a wind that now contained us.

Dr. Eisenberg got to the body first, circling the two Alterians standing before it, a small child in the arms of one, to lay hands on it. She did that as simply as if the body was alive, a creature she could help.

I joined her. "The body's quite cold," she said. "the blood congealed hours, days, ago."

I looked up at those wounds. I am forty-five, have spent all whose years in space, was born on a ship much like the *Landsman*, have seen far more than I care to remember, but I was sick there under the beautifully blooming tree. The body hanging about two feet from the ground was a child, maybe ten years old, small breasts just beginning to form. Ruby red blood which had flowed from wounded nipples and the vagina was frozen in thin rivulets.

"We have to cut her down," Allison said. I didn't know how long she'd been standing beside me, freckles I'd never noticed suddenly alive in her greenish-white face.

I looked at the two Alterians, their hungry eyes fixed on the bulging eyes of their daughter and called for Bronstein. He monkeyed his way up the tree and across the branch to the rope.

"You'll have to lift the body, take its weight off the rope, so I can untie it," he called down. And there were crewmen to take the weight of the child, to catch it, lower it gently to the ground when, finally, finally, the knot was undone.

Only then did the parents unfreeze, sinking to the ground beside the child. The mother took the terrible head into her arms. The child they'd held lay his head on his dead sister's belly, the father on his knees rocking gently back and forth over his family. We turned away, left them to the awful privacy of their grief, now, ours as well.

"Why did they send for us?" Allison asked. Unshed tears burned in her red-rimmed eyes. At five and a half feet, she was about the same height as the child, a slender woman for one of our kind, but square when you compared her to the Alterians. "Why an earth vessel? That's what they wanted, any Earth vessel."

Alterians don't disintegrate as they age, but their hair and their eyes grey, so we knew the male who approached was an Elder.

"Come this way, please," he said, his reedy voice firm.

That's another thing about the Alterians. You don't argue with them. That had never occurred to me before, maybe because I'd never had a reason to think about it. Nor had the crew who fed data in the computer's information bank. Someone, sometime, must have wanted something out of them, yet there was no recorded attack made on these notoriously gentle people. That contradicted history; gentle people don't usually fare well.

We left the children with a few parents to comfort them and fell into a scraggly line, space between us. Grief does that. It isolates. The most graceful of us was heavy footed in comparison to our steel grey guide, but we'd all done as we were told. My crew took their orders from him as I had. I'd not seen this strength naked before, but it didn't surprise

me. We must have been dimly aware of it, or we'd never all have left them in peace.

Occasional Alterians, locked in that trance-like state were still scattered about in seemingly random fashion, stony faces looking any which way. The silence, now that we were away from the hanged child, was once again complete. Yet none of them looked lonely. Even the isolated individual, single as a post, seemed to be in deep communion.

Ordinarily, when we were around, they spoke to each other, just as we did, faces alive with words, bodies undulating to the rhythms of speech in our language though I'd overheard on occasion another tongue. So this deep listening was something I'd never understood, understood even less now when all of them were at it.

The pace was killing. After an hour's walk, taking two steps for every one of our eight-foot guide, we stretched out for maybe half a mile. All that way, Alterians stood stiller than trees. Some of us had gone as far as their space-ship restricted limbs were going to take them.

"We'll have to rest," I said loud enough for the grey Alterian to hear me and raised a hand to signal my crew. They saw the hand, but anxious eyes watched the grey back. When it stopped, they sank to the ground. I didn't bother to sort that out. Just left it, something I'd deal with once we knew why we were here.

My crew sank gratefully to the ground, Allison, my first officer, flat on her back, one arm raised to shield her eyes. My muscles wanted to do the same, but I had to talk to the Elder, standing, not impatiently, but with his back to us, waiting till we caught our breath so he could be on his way.

He spoke before I had a chance to frame a question. "It's not much farther. You'll see for yourself."

"What will I see?"

"Your people. The ones who did this."

"No!" I shook my head vigorously. I knew it could not be any of us. I hadn't a qualm, not a doubt. We're picked for the service. We marry amongst ourselves. Those who aren't fit are returned to earth, not as failures, mind you. They simply don't have what they need to travel though space. So I knew.

His grey eyes flicked over me and went on to size up the physical condition of the crew. They looked fit to travel.

"Let's go," I said.

He was making for one of the marvelous groves of old and many colored trees that dot Alteria. Sunlight filters through green leaves onto boles as luminous as the giant blossoms that bloom there. More Alterians were in the vicinity, but nowhere near the number that had surrounded

the hanging tree. And all of them looked off, anywhere, as long as it was away from the grove, the most beautiful thing in view, but even the Elder didn't want to see it.

We entered sun speckled shadows, breathed in the honeysuckle smell of forest. Then we saw them: ring after ring of humans, undeniably humans, sitting on the ground, knees folded, facing outward. They leapt to their feet when they saw us, shouting, cheering, welcoming us, their rescuers, not a doubt of it. But they hit against thin air, a foot from their outer circle. They screamed, cursed and screamed again as those behind, crowding towards us, pushed them against that thin air.

"You will sit," the Elder said. Somehow they heard his reedy voice. Those behind backed off, releasing the first row, the ones who'd been pinned against the thin air they couldn't push past. The screaming stopped.

"Oh, no!" I heard the revulsion I felt in the pit of my stomach in my lieutenant's wail. "No, they can't be our people." Looking at them, just knowing we shared the same skin, made our skin crawl.

"Yes, we are, we are!" A shiny faced one leapt to his feet. Eyes on the Elder, he stayed in his square, but he jumped up and down, anxious to get us to see a connection. So eerily like the scrawny Bronstein he might have been his brother, he was a good looking boy, spaniel eyes, shiny brown hair, but we didn't want him.

"They speak your language. They are yours," The Elder said.

"Where'd they come from?" Bronstein, not much older than the boy, asked.

"From Earth," the boy said jubilantly. "We're from Earth, like you!"

Maybe Bronstein noticed that they looked somewhat alike. His face cracked into a grin. Then he remembered, and the smile faded. But that resemblance troubled him. "How do we know they're guilty, sir?" he whispered, eyes on the Elder. "That's their version. They are extraterrests. Can we trust them?"

"That's right!" The boy inside that circle must have had mighty good ears. "They're not human. It's not as if they can feel things—like we do. Hell, they're just some kind of crazy, two-legged giraffe that puts on baggy pajamas. They're so funny." He pointed at the Elder and giggled, then slapped the back of the guy beside him.

"Shut your friggin mouth, you stupid shit," he snarled and smashed a fist into his face. Unsurprised, the boy subsided, hand to his jaw.

"They did it," I told Bronstein. Bronstein forehead wrinkled. He was having trouble seeing how it could be true.

“The black ship on the landing pad beside ours, it was theirs?” Allison asked, her hand on her jaw a mirror image of the boy’s.

“*The Devil’s Isle*.. I am Mary Bondieu. This is Jack.” A white-haired woman, sixtiyish, in the same baggy uniform stepped out of the shadows.

“The least of their sins, they landed here when they knew it was forbidden.” The man standing beside her, Jack, looked shrunken, older.

I waited for the Elder to tell me what these two were doing outside the circle, and free to move about.

“They tried to warn us—too late, we knew.” His eyes flicked past the couple and rested on those contained by the circle. “Mary is his mother.” His grey eyes met mine, but I think he must have been reading the currents passing from mother to son, the fury directed by all of them out at him, the hope the convicts had of disarming us, of twisting us who looked so like them—all of a kind, a family. I could read currents like gnats swarming round the Elder, confusing and exhausting.

She, too, studied the circles of seated humans, dressed in those baggy, khaki suits. More than half the crew of a regulation freighter like the *Landsman* were out there, all young. Maybe fifteen were past thirty, and a handful of women. Her eyes, too, were grey as the elders but she was of one flesh with the butchers as were we.

“Just what kind of flight is this?”

“Transport, exile, call it what you will. A prison ship—didn’t you recognize it?”

“What the hell are you talking about?”

She took another look at us. The cut of our costumes probably told the story. “You left before they emptied the penitentiaries, didn’t you?”

“They had a fleet of obsolete ships and nowhere to build prisons, so they convene an international panel. The members don black hoods when they decide for expulsion. It’s quite a show.” She pointed to a dull, slight man. “He killed eight boys. Those three,” a unit that had segregated itself as much as possible from the others, are terrorists who blew up a missionary hospital. A few choose to travel with them. I did. Jonah is my responsibility.” She pointed to the engaging young man, the Bronstein clone. Jack chose to come with me. She patted the man’s shoulder without ever taking her eyes from her son.

“She thought we might make a difference,” the old man beside her sighed deeply.

“You mean you load up a ship with human debris and just send it off into space?” I exploded, my arms waving from them to the high heavens above me.

“In such a huge universe,” the man said, we thought somewhere amongst those billions of stars, there’d be an empty planet where some of them, god knows, not all, would have a chance to begin again.”

“Knowing that they had to learn to run the ship, work together to survive, yes, we thought it might work. Nothing else had.” The woman sounded bone weary.

“It has worked in the past,” the old man insisted. “Survivalist schools, incorrigibles have come out of them the better for the experience. And there is Australia, once, a penal colony.

“Mass executions were their alternative. We had to try this.”

“She had to go along.”

I thought of them up there with that pack of animals, caged now as they had to be caged. “That was admirable,” I said grudgingly.

“All of them didn’t participate,” Jack said hopefully.

“The few of them that objected would have died with us right then if they hadn’t been after other prey,” his wife asserted. She never said where her son was in that equation.

“You’re telling us that the Earth flushed its human sewerage out into space instead of dealing with it.” Allison reddened with the anger she tried to keep in check.

“All inhabited planets were warned—told to shoot them out of the sky if they tried to land. The message was beamed out for a full Earth year before we took off.”

The Elder looked at them, at us, perplexed.

“The Alterians wouldn’t have known what you’re talking about,” Allison said for him. “They haven’t got any prisons. They don’t even lock their doors. And what would they use to blast ships out of the sky?” Her arms opened to indicate a landscape whose shimmering cities, had they been visible, would have appeared as delicately made as sand castles.

“They are yours,” the Elder said calmly. “You must deal with them.” He indicated the scattered figures of his people. “We are growing tired.”

“Yeah,” the hulk who’d punched his neighbor yelled. “Get us out of here. You gotta help.” His fellow prisoners agreed, vociferously.

“What do you want us to do with them?” Brow furrowed Bronstein looked from the prisoners to the Elder.

“Cleanse them, guard them, take them away with you.”

Bronstein’s jaw hung slack. He looked a fool with it wobbling as he shook his head. “We can’t. There aren’t enough of us,” he said when he’d put himself together.

“He’s quite right,” Allison chimed in. “There are almost as many of them as of us.”

“They’re dangerous. Look at what they did to you. They’ll do it to our children, too,” Sharp spoke up shrilly. “Destroy them” hung in the air my crew breathed.

“No, you’ve got us all wrong!” one in the circle said. “You’re our kind. We don’t hurt our own kind.”

“We have no way of dealing with them.” “I feared as much,” the Elder frowned. Then he did it, too—disappeared into the trance everyone else on that planet shared.

“My god,” Allison said. “What do we do now?”

I felt as lonely as she did, support suddenly gone. The Elder was there beside us, but more unreachable than a sleeping man. The three choices he’d given us were all impossible. And the unbearable fourth meant turning ourselves, ordinary people, into executioners..

“What does he expect us to do, choke them with our bare hands?” Allison asked. Her back was to the prisoners and she spoke softly, but they shouted at her, at us, as if they could read my thoughts and hear her words. “And Bronstein’s right. There aren’t enough of us to guard them, even if we’d had the weapons.”

“Get them back in their ship. Get them out into space,” Jack said, earnestly. “They won’t do it again.”

No one, not even Mary, bothered to answer him. But the terrible solution did occur to me—the one way to rid the universe of them. Seduce them aboard their antique ship; once it was air-borne, blast it out of the sky! My finger could release laser rockets we used to clear landing sites for our ship I could become their murderer, executioner: What difference did the word I used make? I would be the one who destroyed life, all on my own.

Like a runny-nosed kid, I sniveled. It wasn’t fair! I shouldn’t have to sentence myself to that kind of diminished life.

Jack’s solution, just letting them disappear into space, suddenly seemed attractive. The Alterians didn’t seem to give a damn what became of these murderers as long as we got them off their planet. We could wash their hands of them as the mother planet had done—fling them out into space and to hell with them!

The muttering behind their invisible barrier grew louder, angrier. I felt a stab of fear. What if that fence came down? What if the Elder withdrew altogether from them and from us, as well?

I could see a man sidling toward the rim, finger pointing, ready to test it. I had to have a way to protect us against them—against our own kind—here, on an alien planet, light years from the home that should have united us against all else.

Bronstein, Sharp, my whole crew stared, fascinated, as if that circle were a cobra waiting to strike. We hadn’t a weapon amongst us. All we could do was make a run for it, get back to the ship and secure it against them, before they stole it from us.

The Alterian stirred. Behind the barrier, the mob sank back to the ground. That’s all it took—one Alterian to keep them in check. Suddenly, I was furious with the Elder. Why put it on us when he had the power to control them. I didn’t want to remember how hard it was

I started to say as much, but he looked so very, very tired..

“We can give you a day to make arrangements.” His grey eyes dug into mine.

We weren’t likely to find any more of a solution by then, but I felt vast relief—as if a reprieve had arrived and in time. “What’s holding them here?” I pointed at the swarm, row upon row, contained so neatly.

“We are, all of us.” He sounded faintly surprised. “We thought you could take over.”

“Bind them within some electrical circuit the mind conjures up? We can’t,” didn’t even understand this capability, let alone own it.

“You lack the sense by which we touch across long distances?” the Elder, sighed. But now, we need more,” he explained. “Some must grieve with the stricken family, touch them in their terrible loneliness, share their grief so that it doesn’t destroy them. Others must maintain the daily network, as usual. And the rest, all the rest, must maintain the circuit, the current that contains your people.”

“My people!” I shuddered, wanting to deny it. I hadn’t a thing in common with the murderous creatures inside that circle—except that we were one species, they and I.

“I wonder if it’s like the shark’s extra sense,” Allison mused. “Sharks can pick up electrical emanations from other creatures that swim in the sea,” she explained to the elder. “It helps them hunt their prey.”

“We are tiring, rapidly,” the elder reminded us.

“What if we got them back to the ship?” Bronstein asked me. “Couldn’t we use their space vessel to contain them?” Then the Alterians could relax for a while.”

It seemed plausible. “Could you set up a tunnel, open at one end, close behind as they move through?” I asked the Elder.

He nodded, without needing to consult the others.

“You don’t need to worry about us. We won’t make trouble,” the big-eyed youngster called out. “All we want is for you to get us out of here. Just don’t leave us to them!” He shuddered as if he’d been the victim of that terrible assault and not the perpetrator.

I turned my back on him, started to walk with the Elder back up the road by which we'd come, my crew falling in behind. I had to shout to make myself heard over the screams of those we were leaving behind. "We'll need weapons," I told the Elder. "And we'll have to check their ship before we let them return to it."

"You bastards!" I heard behind me. "You're deserting us, betraying your own kind."

Allison turned back, so I did too. "We'll be back," she told them once they'd quieted down enough to hear her. I saw the hulk eye here from shoulders to toes. He licked his lips.

"I'll be waiting for you," he said. "Don't forget now, the name's Prondle."

"And I'm Lee," The brown-eyed boy shouted. "Sheridan," "Burdet," "Carter," all if them wanted to be on the record.

Allison weighed Prondle's look before she turned away. "We won't be able to control them," she said as we walked after the others. "They couldn't on the home planet, with all their resources. How can we do it here, with none?"

Keeping up with the Elder was easy now. He walked slow as a man walks through water, fatigue clutching at his legs, making each step difficult. I could feel the fence weaken as I watched. We mightn't have even that one day.

Sharp rounded up the children. No arguments. Not one of them needed to be told that this wasn't a time for a holiday on the planet. But Mary stayed behind and Jack with her.

My team boarded the black ship. We had to go over it very, very carefully, looking for anything that could be used against us or the Alterians. The controls were quite simple compared to ours. It was so obvious we almost missed it. The landing gear had the same capacity to blast a landing site out of mountains that we had. If this ship took off, that crew could use that system to level Alteria or to blast us out of the sky.

I sat in the captain's chair, my thumb testing the button I'd thought to use on the horde, remembering Prondle and the hanged child. That they'd do it with never a qualm, I hadn't a doubt. Lee, whining behind the electric fence, had already said as much. He thought of himself as the one being who had the right to live. The Alteria were critters who'd got in his way. He'd never forgive us for siding with them.

"We'll have to destroy the landing gear," I said, hearing myself, cold and logical.

"They'll be trapped, damned to wander, forever." Bronstein ran an agitated hand through his straight brown hair. "They'll be trapped in space, forever! We can't do that!"

At my shoulder, Allison studied the controls, my finger on the button. She sighed deeply. "The captain's right," she told Bronstein.

"We can ask for backup," he gibbered, guard them somehow till help gets here."

"How long would it take for the message to reach home, and, after that, How long before a relief ship arrives?"

"Even if we could control those savages, would you be willing to spend years of your life at it? I used my right hand to wipe the tension out of my forehead. "What makes you think we could survive? They'll attack us as soon as the Alterians free them."

"No—," Bronstein shook his head. "No, they just want to get out of here, safely. They need us. They won't hurt us."

I looked to Allison for support. She shrugged. We couldn't know how many of the crew would side with young Bronstein. Most of the young, probably, would pity the fair-faced prisoners trapped now in the alien's circle, forgetting why they were there.

Feet clattered on the gangway. We faced the hatch. Kelly burst in, red-faced and panting. "The Elder came to warn us. Some of them have escaped. Too many Alterians had to help the survivors during the burial of the child. The rest couldn't maintain the fence at full power!"

"How many?" I asked, my hands moving over the controls, starting system that would destroy the laser's power.

"Five, maybe ten, he's not sure."

"We can handle them," Bronstein pleaded with me. "They just want to get to this ship, take off, get off this planet."

"We'll see," I temporized. "Now, get off the ship, get clear. There are going to be some fireworks."

"No, captain!" Fingers twitching, Bronstein eyed the controls. "You can't do it!"

Not easily, shifting, unlocking, refocusing, but I could override controls and set the charge. Too much, too little? We'd all find out.

"It's done. Now, move! Get out of the way." Hand to his shoulder, half shoving him through the hatch, I led the way. Kelly and Allison followed. They got inside our ship before the bang. It wasn't strictly necessary. I'd done a neat job. The black ship rocked on its foundation, but stayed firmly in place looking just as good as new. They wouldn't know they couldn't land until they tried.

I met the Elder outside our space ship. "You can funnel the others, release them as they board," I said.

He nodded, went into a sixty-second trance, and returned to me. "They'll be contained," he warned me as though he half expected me to tell the prisoners so.

“As they must be. There’s no telling what mischief they’ll try on their way.” I said, still trying to disassociate myself from them.

He looked at me curiously, an eight foot tall, grey-eyed, grey-haired creature who could not quite believe in the chasm between me and that horde that belonged to my species. We were all one to him; we should have been able to touch each other deeply enough to heal the wounds of any one of us.

I left him out there, Climbed back into my ship, ordered my crew to break out weapons, watched my people scurry about, securing the ship for attack. We’d spent a generation together traveling through space, and suddenly I saw us, as separate from one another as were the stars.

Theoretically, we were trained to handle weapons. The youngsters made a game of acquiring skill, practicing their draw like the cowboys of old. But I chose senior crew to see the prisoners aboard the black ship that could become their coffin.

Escapees arrived first. They encircled us. We needed those weapons to make space between us. Prondle led the way, seconded by Lee, who looked so innocent that I wondered what he could have done that would condemn him to a prison ship. They looked our ship over as they told us how they’d gotten out.

“They’re saps,” Prondle sneered at the Alterians in the field. “Boy, would I like to give them some of what we got.” He poked at the closest of the entranced Alterians and was rewarded with a burned finger. Waving it in the air, he jumped from foot to foot, cursing all the while.

“Not such saps, after all,” Allison said with a smile. Obviously, the current that had herded the prisoners now sheathed each Alterian. We saw a few emerge from trance as the scraggle of released prisoners went past them. They focused, then moved. That’s all. No stretching, no yawning, nothing to mark the passage from communing to ordinary consciousness.

“I’m Lockhart,” a blonde, blue-eyed choirboy extended a hand. Had Bronstein been out here with us no doubt, he’d have taken the hand and gone flying over Lockhart’s head into the midst of them. I waved with my left hand.

“That’s some ship you’ve got there,” Lockhart said, not bothering to hide his covetousness. “We could really get places with a ship like that! This tin can—” He dismissed the black ship with a contemptuous wave. “We just about made it to a dump like this.”

I saw Lee edging round our small band as if he wanted a better look at the *Landsman*. I waved him back to the others. He went without a word. But we moved closer to our ship. We had weapons but they had the numbers. They

probably weren’t desperate enough to rush us. They had their ship, but I daren’t take the chance. Prondle had eyes only for Allison. She ignored him, but I couldn’t.

“The Alterians want you off their planet,” I said and saw triumphant looks flash from one convict to another. “They’ll release you in our custody,” I went on as if I hadn’t noticed. “We’ll escort your ship back to earth. It’ll slow us down, but we haven’t got a choice.”

Allison flashed a sunny smile at me. She saw the point of it. The black ship could orbit the home planet while small craft ferried the crew down. I wasn’t the monster Bronstein thought I was.

“You mean they’re not going to do a thing to us!” Lee clapped his hands and did a little jig. “We’re home free!” He pounded Lockhart on the back. Lockhart’s mouth made a tic of a smile.

“I told you they were saps.” Prondle flicked a dismissive glance over the Alterians.

“How’s about us riding with you?” Lee looked lovingly at the silver ship. “You’ve got plenty of room.” Lots of them liked that idea. Shouts echoed across the field as my crew backed onto the boarding ramp.

“NO!” Mary Bondieu and Jack, just now catching up with the rest of the mob and panting with the effort, circled the prisoners. “He blew up a building filled with sleeping people.”

Lee cast a hurt look her way. “I thought it was empty,” he explained. “I didn’t mean any harm.”

“You’ll travel with us,” I told the couple.

“No, they won’t!” Prondle caught hold of Jack. “They belong with us.” He leered at Jack. “Don’t you?”

“I don’t want to,” Jack whimpered. But Mary nodded.

I fired into the ground between them. Prondle cursed, but he leapt back from the burning ground. Hand in the air to wave the others forward, he watched my weapon find his chest.

“Take them!” he said. “Those shits! You deserve them.”

Careful not to cross our line of fire, Jack made the wide circle round the jeering horde that would take him to the boarding ramp. Mary hung back. He waited there, back straight as an exclamation point, watching her. She hung in space, much the way moths caught in webs do. We could not see the threads but somehow the Elder must have.

They two rotated, some steel cable binding the one to the other. The Elder drew her total anguish to him so that his face creased, his body contorted as Mary breathed some deep substance from him. And then the load equaled, her share resting on squared shoulders. And she started toward us, Jack, the *Landsman*.

"You mustn't. Why won't you come with us?" Lee asked piteously. I could hear Mary sigh." Mama," his wail, accused her.

She paused, turned back, and caught his eye. He was so sure he would reel her in, but she continued her slow walk towards our ship.

"You'd better go aboard," Allison told the bewildered Lee. The convicts surrounding him saw the Alterians gathering, converging in the fields: more and more surrounding the ships, crowds of Alterians filling the fields, crowds as dense as the circle round the hanging tree.

I searched for the Elder who'd lain out our choices. He stood right where he'd stood all along. But he was in stasis, tied up, apparently out of touch with us.

The wary prisoners started to move towards their boarding ramp, sidling at first. Then individuals broke away and made a run for it. A mob of them were still trying to get through the hatch all at once, like a crowd trying to escape a burning building, when their rockets started to fire.

"My god," Allison said. "They'll burn themselves up! But the last of the squeezed his way through before there was any danger of that. At least, they didn't leave cinders, corpses, behind.

"They'll be well out into space before we lift off," Sharp warned.

"No problem," I said. "We've twice the speed. They can't disappear off our viewing screen. We'll catch up."

"No one's going to welcome the cargo we're bringing back. And it's going to cost us one hell of a lot of time to get it home," Well into his sixties, Sharp sulked.

Bronstein came out the door looking very pleased with me. He and the Alterians watched the black ship climb towards space. I didn't bother. I'd seen plenty of ships take off. I was waiting for the Elder to unfreeze. I wanted to know what half the planet was doing at the spaceport.

"Captain!" Pritchard screamed for me. I pushed my way through my crew to get to him. "They're turning he said. "They're coming back in for a landing."

"Not a landing," I smiled grimly. They'd made the choice I'd feared they'd make. "They're going to try to blast us, flatten us the way we blast a mountain—smooth us out and land on top of us."

"What'll we do?" he asked in a horrified whisper. "Shall I try to raise them?"

"They wouldn't hear you."

:"I could arm our rockets!"

"It's all right." I put an arm round his shaky shoulders and raised my voice so everyone could hear me. "I knocked out their laser system. They can't blast us!"

"You're sure?"

I nodded. He repeated the information over the loudspeaker, then came out to watch with me and half the crew. The huge black ship plunging towards us began to fill the sky. Murmuring Alterians pointed towards the ship, then fell silent, all of them going into that communal trance.

We felt the wind the black ship made when it started to brake. But they'd been too sure that their field of fire would destroy anything in their way. They'd left it too late. Engines screaming, still they hurtled towards us. Slowing, perceptibly slowing, but they were too low. Their engines weren't powerful enough to catch that huge weight and lift it into the sky. They were going to crash into us—annihilate the *Landsman* and half the Alterians, helplessly frozen in deep trance all over the spaceport.

Bitter bile rose in my throat—my fault. I should have warned that horde that they had no chance at all, told the black ship as it took off that it could never turn back, never land..

The wind from their rockets flattened us and set the *Landsman* rocking on its pad. Then the black ship burst into light, like a star exploding. We ducked, expecting flaming debris to rain down us. But nothing fell out of the sky, not a piece of ship, nor a man, not even an ash. Openmouthed, we stared up at the empty sky, watching the last twinkling ember disintegrate.

One by one, in the field around the ship, the Alterians woke to us. Undulating, some of them moved towards us, reedy voices welcoming us as if we'd just now arrived. For them, perhaps we had. The time between, the time they'd spent deeply joined, passed for them without measure. The black ship they'd jointly annihilated might never have been; their terrible grief they'd shared out amongst themselves, and it was bearable.



B All U Cn B

Fran Van Cleave



“And God ... bless ... America!” the President thundered to a close, applause and trumpeting angels shaking the crowded House of Representatives. Seated frontside with other members of the Presidential guard, Sgt. Andrew Lewis pasted on a pious smile and clapped so hard his palms stung.

The white marble archangel statues flanking President Billy Bob McTaggart sported out-sized wings and heroic stances befitting Revolutionary War veterans, but it was the virtual angels that really impressed the State of the Union crowd. With the House wired to a fare-thee-well, both Enhanced and everyone with Hallelujah wearables saw the heavenly beings cavorting overhead, the whole diamond-bright flock brandishing long, impractical gold trumpets and preening like peacocks. People shouted and waved at the electronic images; two women actually collapsed in fits, moaning and foaming at the mouth.

Andy kept clapping, but his smile hurt; he felt another headache threaten. Why didn't the blessing work for him? Virtual angels weren't a pathetic deception, just reflections of a higher reality. He'd accepted it intellectually. Why couldn't he *believe*?

A silent message scrolled across his field of vision in Captain Blaine's trademark blue font: *Sgt, u bst scort Sntr Hmblin hr frm airprt 2nit. He b gon mdnit srvc w/Prz.*

Andy's heart thudded. *Doesn't Hamblin have his own escorts, sir?*

No-Nos nfltr8d m. Mst stp kidnapnz r America lz confidns. U Enhnced hv strngth of 10, so git.

Yes, sir. Resigned, Andy rose and made his way up the aisle, murmuring “Excuse me” as he slipped past Blaine's penitent form.

The captain nodded, head bowed over his clasped hands. He'd been the roughest officer Andy had ever served under in the Greater Mideast War, a stone killer with a mouth like a rapper with Tourette's. Now he was the most punctilious of the President's Flaming Swords, a shining example of the blessing.

Had Blaine found him out? Set some sort of trap? No, Blaine wasn't that sneaky. A worrier, that's all.

That's what Andy kept telling himself.

At the foot of the dais, President McTaggart's craggy face and thick silvery hair towered above his fan club of portly businessmen. Picture Andrew Jackson's hair, Kennedy's smile, and Ronald Reagan's imposing physical presence – that was the new Commander in Chief.

Andy couldn't depart without taking his leave of the President, so he waited while McTaggart signed autographs on foolscap copies of the Covenant Constitution and posed for pictures between the angel statues.

Cameras flashed like tracer fire as reporters vied for the best angle.

“Okay, folks, 'nuff for now.” Waving off the reporters, President McTaggart grinned at Andy. “Hiya, Lewis, how's my Superman?”

“Fine, sir. Sorry to leave so soon after such a rousing speech, but I—”

“Oh, I know y'all gotta go, on account of Blaine sminged me. But you ain't goin' out in that cold 'thout some Uncle Jim to warm yore innards.”

Uncle Jim? “Surely the President has more important—”

“Gotta tradition to uphold!” declared McTaggart, blue eyes sparkling. Barking a command into his silent messenger – McTaggart still hadn't got the hang of sminging – he ushered Andy stage left, past the reporters and the cameramen and the throng of conservatively dressed admirers, to the cloakroom used by Representatives for socializing between sessions.

“Gee, Mr. President, I really—”

“Sit! Rest them brand-new legs.”

“Yes, sir.” Weak in the knees, Andy practically collapsed at the hand-rubbed walnut table. He'd been stationed in D.C. several months, but this was his first time alone with the West Virginia four-star who'd swept to victory in

November within a year of winning the Greater Mideast War.

A part of the Earth that'd been drenched in blood for over two thousand years had suddenly seen peace breaking out all over, friendships springing up between Arabs and Israelis in the demilitarized zone, Iranians welcoming American troops after the worst fire-bombing since Dresden and Tokyo in WWII. Hell, plenty of backsliding GIs got saved on the spot.

Maybe after two millennia, it'd finally struck the Arabs and Israelis that what they were doing was counterproductive. But McTaggart made it happen.

As McTaggart reached into the liquor cabinet, a young brunette hurried into the room. "Chief, let me get that for you."

"Thanks, Lizzie honey."

In New Morality fashion, she wore her long brown hair snugged in a tight bun, a long black skirt and snowy high-collared blouse a shade lighter than her creamy skin. She took out a quart of Jim Beam and filled two crystal shot glasses. "Here you go, boss." Her gray eyes flicked over Andy.

You got so you could tell if there was anything worth looking at under these frumpy clothes, and boy, did she ever. Below the neck. No brains, just a big babe with lots of junk in the trunk. Mike would've called her estrogen on the hoof.

McTaggart raised his glass. "Y'all okay, boy? You's a mite green."

"Fine, sir. Should I say grace?" Could the President see his lack of blessing? How long could Andy go on like this?

"Not for Uncle Jim." The President smacked his lips. "Don't tell the missus." The din of the crowd milling around the House floor had faded to pink noise. Nobody had privacy chips like the President's.

"No, sir." Andy gulped down the shot.

"Sergeant, what's it like being saved by a miracle?"

Defense Advanced Research Projects Agency would argue that term. "Honestly, Mr. President, it felt like waking up from anesthesia. My head was so banged up, I don't remember most of it." But regen didn't work for everyone, so you might call it miraculous. Andy couldn't bring himself to, though being saved from life as a doorstop seemed close enough. He'd've thought more of it if it hadn't killed Mike Jeffers.

But Mike was dead. No getting around that.

The press secretary arrived to take the President to the banquet, Lizzie refilled their glasses and stowed away the Jim Beam. "Your limit, boss."

"Nice gal." McTaggart beamed as she left. "She'll make somebody a fine wife, and then I'm out my best intern. Ah, well."

"Yes, sir." Andy tried, but he couldn't picture McTaggart boffing her. The guy could've supervised Santa Claus. "Thank you for the whiskey."

"Ain't nothin', boy."

Andy nailed the second shot and dashed down to the White House parking garage, coat flapping around him. Truthfully, cold rarely bothered him anymore.

He palmed the ID plate and waited for the buzz of recognition. By the time he stepped through the metal gate, his auto-car had purred up to passenger loading, the flaming swords logo glittering silver in the harsh overhead light.

"King of Kings International Airport," Andy said, trying to relax as the car pulled out into the heavy D.C. traffic.

After six months in an induced coma while recovering at the DARPA hospital, he'd returned to a country unrecognizable from the one he left two years earlier: wearable computing and its incessant images; cars that drove themselves; and everyone so religious you had to fake it or be accused of Harris-ey.

Andy sighed with annoyance at himself. The world changes. Get used to it.

The radio turned on a station it thought he'd like, one with an analysis of the State of the Union address. After a few minutes of predictable blather, a nasal voice declaimed, "And now an ethical pause from Sponsors of Morality!"

Andy changed the channel, but SM was on every station. "... guilty as charged! Eric Smith, you was tryin' to stop the Second Coming, which shore 'nuff is comin', hallelujah!"

"I'll save him!" exclaimed a chirpy woman's voice. "I'll pray for him every day, and feed him nourishing food, and sing him to sleep with hosannas!"

"Why, jury, ain't that the nicest thing y'all ever heard?"

"Off," Andy said curtly, rubbing his temples. Staring blearily at the Christmas lights flashing past his window at high speed – every house decorated with Stars of Bethlehem and electronic crèches with Marys and Josephs and cute little Baby Jesuses – he unholstered his Sig Sauer and checked it thoroughly. Loaded, of course, the action smooth as butter. The familiar act failed to calm him.

He didn't fear being killed by the Know-Nothing Federalists, or No-Nos – whatever you called the ousted Democrats who claimed McTaggart won the election by fraud.

Reality was, everyone loved McTaggart and his God Party. There was no outrage, no marches and riots like in the old days. Nobody but the fringe seemed to care. Maybe America was truly dead, drowned in an ocean of niceness.

The person Andy feared most was himself. Half screwed-up man, half war machine, he belonged to nothing and nobody. If they discovered he didn't have the blessing and began praying over him night and day, he'd shoot himself.

If the headaches kept getting worse, maybe he'd be dead before then.

Sighing, Andy blinked up a book on neuroscience. Implanted electronics enabled him to download everything from battle tactics to books—including some from clandestine dealers in Canada. He wouldn't have risked it except for his insatiable curiosity about the blindsight he'd developed halfway through his recovery.

Dr. Garreau had called it an ancient sense, too primitive to really be termed "sight." Andy had imagined himself as a blind fish with feet, crawling up from the sea depths into sunlight, finding a million-year-old volcanic beach fringed with palm trees. But when asked about this evolutionary scenario, Dr. Garreau had looked frightened and quit talking.

The car began to slow. Reluctantly, Andy blinked away the diagram of the brain's visual cortex, expecting to see the turn-off for airport parking.

The Maryland exit flashed green. Either the car had sensed the whiskey on his breath and decided to take him home, or the programming was screwed again.

"Car, this isn't the way to King of Kings Airport."

"I'm sorry, but there is a serious accident near the airport. I'm detouring for your convenience."

"I don't care. Turn around." Something hissed above Andy's left ear. Startled, he turned his head and smelled a sweetish, musky aroma.

Gas. Who in this society would booby-trap a car?

Holding his breath, he grabbed the door-handle, but the safety-lock wouldn't budge. Shooting the dashboard would activate the system-failure emergency stop, but he wouldn't risk a ricochet.

Now the car was careening wildly around the bottom of the ramp, deaf to his commands to stop, and he could see ghostly figures approaching. Their urban night-camo flickered pearly-gray and black, near-perfect concealment in the concrete-framed darkness of the city.

Damn. With the pistol butt, he smashed the teardrop-shaped driver's side window, knocked out the glass and bailed.

He bounced to his feet and squeezed off a shot at the lead figure.

Hit him mid-chest, but didn't knock him down. *Shielded*. Andy reacted with the speed of a pouncing cat, kicking the paralysis gun from the fellow's hands and back-fisting

his head. The man dropped; a throat punch made short work of the fellow behind him.

More paraly-guns fired at Andy; the air seemed to burn with electricity. He bounded back up the ramp in huge, ground-eating leaps. A car roared toward him; he vaulted across the hood and tumbled onto the blacktop behind it.

Once over the containment wall, he'd leave the road, run rings around these mysterious attackers. Know-Nothings? The same kidnapers who'd been terrorizing the countryside? They'd met their match in an Enhanced.

But as he hurtled over the wall, he caught a glimpse of a truck barreling down on him from the highway. A figure leaned out the window and tossed something that looked like a flashbang.

Andy felt hot and cold all at once, then everything vanished into a cone of blazing gold light.



When he came to, he found himself in a cozy twin bed, in a small cinderblock room much like his room at home. Same peeling green-brown paint, same wood-framed window with the view of the Painted Desert. Unless you lived in a deadzone, people could find out anything about almost anyone.

Of course it was a pix-window, but if the image was real-time, then it was mid-morning. The Sig was gone, naturally. Along with his clothes.

His headache was worse, accompanied by sharp pains behind his eyes. A cool breeze blew through the room, tingling his nose with the scent of sterilants. He tried gpsing a local node. Heavy electronic jamming roared in his ears, making him wince.

Why was he still alive? They wanted his cooperation. For what? Didn't matter, he was feeling extremely uncooperative. Teeth gritted against the throbbing in his head, he jumped out of bed and tried the door. Locked.

Cool it, dude. This place must be rotten with telemetry. You don't want them to know your every mood, do you?

He could break the door easily, rip it off its hinges. But it would be alarmed, and he wanted his clothes first. Something to eat would be great, too.

The room boasted a gleaming new mini-fridge with nothing inside except half a quart of orange juice and a Coors plasti. He drank the orange juice and used the adjoining bathroom, which was clean and Spartan-simple save for a stack of old medical magazines by the toilet.

As he slammed through empty drawers, a ball of light appeared in the center of the room. Inside the light materialized a dumpy-looking oldster whose potbelly strained what'd once been narrow-legged hipster jeans. Blurred

gray hair, sneakers sunk in the ground, and a wrong-sided shadow indicated a cheap projector. “I’m sorry about this, Sgt. Lewis. We had to play rough to make it look like this wasn’t your idea.”

“Wouldn’t have been even if you’d asked pretty please. Now who in blazes are you?”

“You may call me Omega,” the oldster said in a precise, rather precious tone. “I and my associates are Federalists, the world’s last hope of regaining its sanity. And we know you don’t feel the blessing.”

Andy used his training to slow his racing heart. “You’re crazy. Or maybe you don’t know the President’s guard enjoys by the grace of God a special down-regulated blessing so we can protect him.”

“Bullshit. You have a unique DNA sequence that protects you.”

“Protects *me*? From what?”

“When peace finally happened in the Middle East, it seemed a miracle. The opinion-makers declared it one, and everyone wanted to believe. So they did, right?” The man wore a superior smile. “Not the whole story, alas. Ever hear of a hormone called oxytocin?”

“No.” Andy sat down, longing for a pair of pants.

“It’s a woman’s hormone, released during childbirth to help her bond with the baby. Men have it too, in smaller quantities. It’s the brain chemical of long-term romance, deep friendships, relations between parents and children – any relationship involving trust. Fact is, the hormone causes people to be trusting to the point of idiocy. You’ve heard of the face only a mother could love?”

The hair prickled on the back of Andy’s neck. “Yeah, so?”

“Well, DARPA’s chief, Dr. Gareth Dixon—”

“I know him,” Andy said. “I spent enough time playing his research monkey.”

“Don’t interrupt. Dixon wasn’t merely interested in re-growing appendages, or in building the super soldier. No, he believed Sun Tzu’s maxim that the best way to win a war is off the battlefield. So he sponsored a project to soften the hearts of Middle Eastern fanatics. Long story short, Dixon’s Kinder-Gentler Project engineered a virus with a DNA sequence that kicks human oxytocin production into permanent high gear.”

“You’re saying it succeeded? That it migrated back home, and that’s why everyone’s so religious? This bug is the blessing?”

“You catch on fast. Yes, though obviously the effect is culture-dependent. Look around the world, and you see people agreeing to much worse nonsense than even a few years ago, refusing to hurt someone’s feelings with disagree-

ment no matter how stupid the claptrap they’re spouting, and on and on.”

Andy managed not to clench his fists. “Where’s your immunity from?”

Omega smiled thinly. “We’re world-class experts on disease. We made a vaccine.”

Andy didn’t want to believe this, but it explained too many things. Besides jibing with everything he knew about Dixon. “Then why don’t you just vaccinate people?”

“Because Dixon’s gene is already there; it’s too late to immunize. It must be turned off. And too soon, the Army will summon the nerve to destroy us. Your gene can help us make the antidote in record time.”

Andy frowned. Something about this didn’t add up.

“You’re not opposed to giving us a blood sample, are you?”

“No,” Andy said slowly. Dixon’s bug needed killing. So why did Andy feel less than overjoyed? Maybe because he wanted to be a hero – nothing very heroic about donating a gene. “If you only wanted a gene, you would’ve taken my blood while I was out. How do I know this isn’t a ruse to infect me with a deadly plague? Is that why you made this meeting virtual instead of face-to-face?”

“Certainly not! It’s just that a member of the Flaming Swords is perfectly positioned to disseminate the antidote in the White House, and we’d hoped for your cooperation.” Omega glanced over his shoulder and gasped. “Oh my God, they’re here....” He vanished, the ball of light collapsing into dancing dust motes.

Damn! Past time to go.

Andy grasped the locked doorknob and snapped it off, opened the door—the sign outside said *Doctor’s Over-night*—and walked out.

And found himself in a narrow cinderblock hall dimly lit with white LEDs. Pinging both directions, he found the left an almost solid wall of electronic interference. The right-hand passage was open, studded with optical and auditory sensors that he could tap into, seeing and hearing through them.

The passage ended in an exit looking out on a sunny winter afternoon in a filthy urban downtown environment. Pigeons everywhere, but no police cars. No snow either, so he was nowhere near D.C.

Could he trust a kidnapper? Even if he agreed with the fellow’s goals? According to Omega, the fate of the world depended on Andy’s gene. How could he be sure Andy would do the right thing?

He couldn’t. Maybe nobody could. If the world’s fate depended on kidnappers, then it was time to start his own movement.

But first, he was going to track down this Omega twerp and verify his story. If the Army had already nabbed him, Andy would come up with a Plan B. Turning left, he ran rapidly down the hallway, bare feet soundless on the tile.

At length the hall intersected with a huge, well-lit corridor plastered with arrows pointing the way to offices, the cafeteria, labs, and so forth. A blue and white sign on the wall above the others said: Center for Disease Control, Department of Health and Human Services.

So he was in Atlanta, Georgia. While the God Party reigned supreme in the South, isolated Federalist strongholds had held out where the old government had been particularly entrenched. And if anyplace in the world would've developed a vaccine against the Kinder-Gentler Bug, CDC would.

The sound of boots on tile snapped him back to the present. A squad of men approaching. God's Army soldiers, judging by the crosses embroidered on the breast of their khaki uniforms.

Were they looking for him? Or the Federalists?

Whatever the case, Andy didn't feel like joining them. The likelihood of being seen was high if he retreated down the corridor, ditto if he tried concealing himself with electronic spoofing – their equipment equaled his. Pressing his back against the wall, he thought of how embarrassing this was, standing here stark naked.

Thinking about it made him blush, which squeezed the muscles of his chromatophores, elastic sacs of pigment just beneath the top layer of the epidermis. He felt a tickling sensation, and his brown skin flushed woodland-green, blending in nicely with the wall.

It wasn't exactly like being a chameleon. More like an octopus or a cuttlefish, which changed color with their emotional state. Dixon made war-fighting improvements while regrowing the skins of burn patients like Andy. Whether any of them wanted embedded camouflage had been of no concern to Dixon.

The squad trotted through the corridor intersection, left flank directly in front of him. Andy knew these fellows lacked Dixon's imagination, but held his breath, apprehension fluttering his stomach.

The last soldier hesitated, glancing down the side corridor. Andy waited until the man almost touched him and snatched the paralysis gun from his hands.

The man gaped and collapsed, nervous system overcome by the brush of the paraly-gun at point-blank range.

Andy dragged the limp body into the narrow hall. The uniform proved uncomfortably tight, but it beat going naked. Jamming the cap down over his head, Andy hurried

down the main corridor after the soldiers. Seconds later, he heard the popping of .22 ammunition.

"Hey, everyone!" a man's voice shouted. "Why don't you fellows come out and join us in a nice hot supper? We baked a tuna casserole, and a wonderful pot-roast..."

Body flattened against the wall, Andy advanced cautiously. The corridor opened into a foyer with a sunroof and natural-wood planters with tropical plants placed artfully around the parquet floor. A large fish tank and comfortable furniture made the area look like it might've been a waiting room.

Across the way, an office had been barricaded with a heavy steel desk, behind which somebody was firing a .22 handgun. Anyone's guess if he intended to hit the soldiers lurking behind the sofa with their pot roast and casserole. Mostly he was scaring the fish.

As Andy stared in amazement, a hard hand landed on his shoulder.

"Drop your weapon! Now!" It was Captain Blaine.

Uh-oh. Andy dropped the paraly-gun.

Blaine's eyes narrowed. "Lord have mercy, if it isn't Sgt. Lewis! What y'all doing in an Army uniform?"

"I might ask you the same, Captain."

"Yeah, but it'd be real sassy, wouldn't it? 'Cause I do believe y'all took that uniform off'n one of these Army doo-fuses."

Andy said nothing.

"Well, Sgt., 'fraid this confirms my suspicions about you bein' a traitor and all." Blaine had a talent for slapping Super-cuffs on one-handed. Even an Enhanced couldn't break out of these.

Andy felt like an idiot. "You set me up!"

"Had to. You don't carry a Bible nowhere, so I figured you was in with them No-Nos."

A husky youth in flicker-camo crawled up next to them and saluted. "May I be of assistance, Captain?" The boy's voice was high with fright.

"Keep this prisoner outta my hair. We got a blast going off in two minutes, or at least we... Lieutenant Delbert, y'all set that plastic explosive yet?"

Andy cursed himself. Now who would stop the Kinder-Gentler Virus?

"Not yet, sir," replied the chubby man clutching the casserole. "Gotta deploy our secret weapon first! Hit it, boys!"

"Kumbaya, my Lord, kumbaya..."

The youth shoved Andy ahead of him. "Move!"

Andy was too lost in self-recrimination to notice where they were going. Some distance down the corridor, he heard a dull crump, and the thundering crash of falling masonry.

“That takes care of Blaine,” said the youth with satisfaction.

Circulation flowed through Andy’s wrists as the Supercuffs parted. Staring at his captor’s face – gray eyes, go-to-hell smile – he recognized Lizzie, McTaggart’s intern. “What’re *you* doing here?”

“Among other things, saving your life. You nearly threw a spanner into my whole operation. And unless you want to meet Blaine’s backup, I suggest you keep moving. *This way.*”

A squad of little old ladies carrying fruitcakes burst through the doors ahead; Andy sprang down the stairs after Lizzie.

Two floors down, they staggered outside. Though she’d shot a man carrying an automatic rifle on the stairway, she wasn’t breathing hard. A cab rolled up to the curb; its occupied light flashed off and on twice.

“That’s ours!”

He reached the door first. “After you.”

“Christ, you’re too dumb to save!” She jumped in and he followed, grinning.

Bullets tinkled on metal as the cab sped away. Apparently well-shielded, the vehicle continued accelerating. Lizzie ducked into the seat and pulled his head down. “As you saw last night, the Federals are not incapable of violence.”

Andy probed the car’s electronics and unwillingly found himself impressed. “I thought I was the only one with a resistant gene.”

Lizzie rolled her eyes. “Oh, aren’t you special! Did they take your blood?”

“No.”

She snorted. “I knew they were slow, but that’s truly pathetic.”

“I suppose you’d have done better.”

“Quite.”

“Time out!” Andy’s head was spinning. “If you’re opposed to the God Party and the Federals, then who are you with?”

“It’s complicated.” Tucking the scanner into her belt pouch, she sat up slightly, enough to reach the cab’s programming panel. “Hang on a sec.”

They were on a six-lane blacktop; glassteel high-rises towered above the freeway cloverleaf ahead. With only a few cars and one truck going the same way, he felt grossly conspicuous; the lack of obvious physical pursuit was not reassuring.

Unsnapping a plastic square from beneath the dashboard, Lizzie unrolled the window. The January wind blew in wildly as she pitched the square at the broad side of the eighteen-wheeler in the next lane and shut the window.

The square clung to the side of the truck. Lizzie’s fingers flew over the panel, and the windshield glittered with that rainbow-hued distortion associated with opacity to visible light. Andy had seen the tech on military planes and tanks, but never on a civilian vehicle.

The cab’s engine roared, then the car rose up above the highway, U-turned, and flew back into the decaying heart of downtown Atlanta.

Andy leaned forward, scowling. “What’re you doing?”

“I dumped our GPS chip and went invisible, now I’m finding us a place to lay low. And if you’re worried about the routing agency, this isn’t actually a cab.”

“With all this high-powered hardware, why can’t we just leave town?”

“Because that’s exactly what they expect us to do. Relax.”

“Right, I’ll do that.” Who could find shelter here? Miles of squalid streets meandered below, bony cattle wandering in vacant lots, cropping the weeds poking up through the snow. Burned-out tenements galore. “So, you’re not a typical White House intern, and you’re probably a spy. What’s your story?”

Her grin ignited steel sparks in her eyes. “There are more sides than Federals versus the God Party. I’m with a third group. The underground, I suppose you’d call it.”

“You kidnapping me for my genes?”

She laughed merrily. “No. If you want me to let you out, I’ll do so. But unless you’re into hymn-singing, you’d do better to listen to our proposition first.”

“What proposition?”

“Hang on, we’re landing.”

He looked down, and saw they were heading for a junkyard. *Great.*

They landed with a jolt that made the shocks squeal, jouncing into an open three-car garage with two rusting hulks up on jacks. A tall black man in a hooded gray cloak appeared around the side of the garage.

Andy breathed deeply. “Late for our mugging?”

“Don’t be paranoid.” The door popped open, and he recognized the man’s smile-creased face.

His old Army buddy, Mike Jeffers.



Shortly thereafter, they were sitting at Mike’s battered kitchen table, thawing out over mugs of strong coffee.

Andy burned with questions about what Mike had been doing all this time. Not knowing where to begin, he picked a safer subject. “What’s up with the CDC?”

Mike glanced at Lizzie. “I’ll let her explain it, since she’s got the biology Ph.D.”

Andy eyed her over the rim of his mug. Whatever a Ph.D. was supposed to look like, she didn't look like one.

Lizzie sipped her coffee. "It's pretty simple. CDC was in the loop about Dixon's Kinder-Gentler Bug. They made a vaccine, but decided they didn't need to vaccinate civilians in North America, just 'key military personnel.' They didn't want to cause a panic, they said. Useful idiots in positions of power often make those kinds of decisions."

"So the bug *was* Dixon's baby?"

"Yes. We believe America was his primary target, not the Middle East."

Andy felt a chill. He'd thought a military man had no business questioning how things shook out since the war ended. If she was right, that looked like a pretty naïve position.

Mike set down his mug. "Sorry I didn't stay in touch, Andy. I just couldn't."

Overwhelmed, Andy simply nodded.

"After my DARPA upgrade, they sent me to Iran. The day the war ended, I checked my paperwork. Lots of unfamiliar legal double-talk; what it boiled down to was I had no provision to muster out. One of my surgeon friends admitted it had something to do with the cost of fixing us. Also, the Pentagon feared we might revolt." Mike smiled wryly. "Some nerve growth occurs in the brain, so increased intelligence is inevitable. You've noticed, I'm sure."

Andy's cheeks warmed. "I just thought people were stuper." "stupid."

Mike sighed. "Any way you slice it, we're supermen compared to naturals. But enhancement changed me from an ostensibly free man to a high-tech slave. Only way I'd leave was in a body bag. I couldn't live like that, and neither could the other Enhanced. First chance we got, we 'died.' The colonel blamed our mortality rate on the technology."

"Where are the others?"

"Dispersed. Can't risk being boxed in and losing everyone."

Lizzie glanced at her watch. "Cut to the chase, Mike. You're the one who thought he'd help. We don't have much time."

The big man leaned back in his chair. "How about it, Andy? Want to take back America? Because the fact is, we have a duty here. Somebody has to stop this bug before the human race is totally destroyed."

"Sure, I want to save America. And, uh, humanity. But how? I guess with my gene, you—"

"I've isolated genes that turn down the bug's oxytocin production," Lizzie interrupted. "Most of us have immunity as good as yours, or better. The problem is distribution."

Mike nodded. "In any case, our computer takeover is tonight. You and Lizzie and I are best positioned to hit DARPA headquarters in Arlington."

Andy felt his stomach turn over. "To do what?"

Lizzie smiled humorlessly. "They have a virus we can use. I'll remove the deadly portion, insert the gene I've isolated, and release it. Let nature do the rest."

Sounds good, but.... "No matter how good your cover story, DARPA won't allow a visitor any time alone. Armed guards follow visitors everywhere, and the building is constantly swept by security cameras."

Mike cocked an eyebrow. "We need a guide. And as far as they know, you're still one of the President's Flaming Swords. You'd give us major legitimacy."

"Legitimacy maybe. Guide?" Andy grimaced. "Dixon put me through lots of mazes there to test my blindsight. I could catch a fly in mid-air, but couldn't tell you how, or how I knew it was there. Blindsight's unconscious. As my brain damage healed, I began to see light again, but I couldn't focus. Even my doctor's faces were blurry. Sure, some dim part of my brain might be able to navigate the building. But I don't know if I can or not. And you guys need your biometrics on file to enter..."

"I'll handle the biometrics and video-cams. You with us?"

Andy glanced at Lizzie, who returned his look with steady gray eyes.

"I'm in," he said. Talk about the blind leading the blind.



After siphoning gas from several junkers into Lizzie's fancy car, Mike split the afternoon between his computer and gadget tinkering. Dusk was varnishing the junkyard as they prepared for departure. They'd eaten an early dinner, which Andy assembled since Lizzie was busy packing a tiny gene-doping wand into the earpiece of her eyeglass frames.

Andy barely touched his food, worried that Mike and Lizzie depended too much on him to pull this off. But what else could they do? The other resistance fighters were out in Silicon Valley, preparing to hack the Angel Network, or focusing on DARPA's academic centers at MIT, Stanford, and Carnegie Mellon.

Pointless to destroy bio-tech memory if Dixon escaped. He had to die, which complicated matters. The man wouldn't be at work at this time of night; he'd have to be found. Andy didn't mind volunteering.

The trip to Arlington took two and a half hours, mostly by air. On the way, Andy quizzed Mike about what he'd meant by "superman."

Mike just smiled. "Different for each of us. More than a strong body endowed with cat reflexes, computer linkages, and brains. More than being superior to naturals. Think about where you're going, not where you've been ... maybe you'll discover a potential no one's imagined. Heck, Lizzie's still working on hers."

Lizzie stuck her tongue out at Mike, who chuckled.

Andy shifted restlessly. "Do you know my potential, Mike? If Dixon knows, he didn't tell me."

Mike patted his shoulder. "That's your journey, son."

Andy stared out the window. He wished he could think of something to say to Lizzie, but how do you chat up a superwoman?

Presently he realized they'd passed Alexandria, and Arlington was dead ahead. The dark patch of ground on the right, just left of the gleaming Potomac River, must be Arlington National Cemetery. For certain they wouldn't be buried in such hallowed ground if they died tonight. Their bodies would probably be mulched into compost and dumped on the Ethics Bureau's victory garden.

He'd die before he let that happen to Lizzie. How had he ever thought her overweight? She was beautiful.

They landed on the street just outside the city of Arlington, finishing the last portion of the trip through tree-lined suburban streets as a conventional vehicle. Past several churches, a funeral parlor, and a cheesy strip mall advertising "Walk-In Botox!" and "Genuine Fifties Dance Taught Here!"

The moonless night fostered the illusion that one might roll up to DARPA's front gate without detection. But as Andy queried the local nodes, he sensed the immense power flowing through the agency headquarters. Kind of like Cerberus the three-headed dog snoozing in a vestibule.

As they followed the circular drive to DARPA's guard-shack, Lizzie touched her lips to his cheek. "For luck."

"Luck," Andy said huskily. He wanted to kiss her back, but it wasn't really a kiss. Besides, what if he blushed green? Hastily, he fished out the visitor's badge Mike had printed for him. Adrenaline was making his hands shake.

The robot guard swiped their passes through a scanner, all the while staring into the car, using its x-ray vision to search for weapons and other contraband. "Pass," it intoned in a smooth mechanical baritone.

Twenty yards down, another robot guard scanned their brains for "patterns of pathology and/or violent intentions." After it waved them through, Andy shrugged, not daring to express relief. There wasn't a square mile in America this wired: the dirt was smart, the air was smart, jeez, even the garbage cans were smart.

The car parked itself in a VIP visitor's slot; they got out and walked up the brilliantly lit sidewalk to the gleaming ten-story building, a dream of burgundy marble and cloud-dark glass. Perched on top, a bald eagle bigger than the car preened and stretched its wings.

Lizzie looked sweet in a navy gabardine dress with white gloves. Mike's suit had been carefully tailored to make his muscular physique look merely fat. Since Andy was himself off-duty, he could get away with a pair of Mike's jeans and a T-shirt beneath a canvas coat.

Here another robot swiped their passes, locked Mike's briefcase and Lizzie's purse in a locker, and demanded a cheek-swab of DNA.

Mike and his hacker friends had spent part of the afternoon hacking DARPA's database to substitute their DNA sequences for those of the assumed identities. Of course, DARPA could have backups none of them knew about. If Mike and Lizzie were nabbed here, even superfast reflexes wouldn't save them.

The smoked-glass doors opened with a pneumatic hiss, revealing the approach of two massive armed guards.

"Enter, God-fearing friends," chimed a musical female voice. "Dr. Jon Prince will meet you in Office One Two Two."

"About darn time," Andy grumbled, holding out his arm for Lizzie.

"Patience, Sgt. Lewis. They're mortal men, not omnipotent."

The two guards were big men with fierce, hyperalert expressions. Not merely Enhanced, they were bigger than Mike and Andy. The black-haired one rested his gaze on Lizzie a fraction of a second longer than politeness dictated.

Did he find her attractive? Recognize her?

Andy ordered himself to calm down.

A corner office, One Two Two sported the sign *Brain Dominance Division*. Inside, pixwall posters of Captain America and Captain Marvel loomed over otherwise mundane furnishings.

That was certainly familiar. DARPA was obsessed with superheroes. Dixon always talked about endowing his subjects with extraordinary powers. Captain America had reflexes ten times faster than normal, and Captain Marvel had SHAZAM: Solomon's wisdom, Hercules's strength, Atlas's stamina, Zeus's power, Achilles's courage, and Mercury's speed. Oh, and soon they'd read minds and teleport, too. Yeah, right.

A familiar pony-tailed man with a thinning white-blond mane swaggered in the office door, pointing his palm phone

at Andy like a paraly-gun. “Hey, Andy, man, long time no see! Back for that upgrade or what?”

Andy tried to match Jon’s molar-baring grin. “Soon, thanks. Right now, I’m just body-guarding. This is Reverend Dr. Johnson and Miss Susie Schmidt from Bob Jones University.”

Eyes twinkling behind old-fashioned glasses, Mike shook Jon’s hand. “Honor to meet you, Dr. Prince. We sure appreciate this young fella’s protection against kidnappers! And of course, he wouldn’t be here without you.”

“Shoot, growing his head back wasn’t nothin’, the hard part’s ... uh, never mind. So, your email said you’re interested in acquiring telekinesis?”

“Yes, indeed,” Lizzie said in a clear voice. “As a student of comparative religion, I couldn’t help noticing how the best visuals help foster the most powerful belief. Based on my research, BJU determined that telekinesis is the church’s future, and Reverend Johnson has volunteered to, uh, beta-test the technology. Your dog studies are persuasive, Dr. Prince.”

Jon Prince chuckled. “Little lady, we’re Jason and the Argonauts, going where no man’s gone before! I can only imagine what telekinesis would lend to a sermon – why, you could make curtains fly as if in a powerful wind, cast lightning bolts ... the possibilities are endless. Can’t walk on water yet, but we’re trying!”

Jon talked nonstop as he and the guards accompanied them to the elevator, dashing Andy’s hope that the guards might be dismissed for an alumnus. The plan had been to tie up Jon in a surveillance blind spot, then have Andy don his clothes. The guards made that impossible.

Worse, Andy didn’t remember anything about this hallway or specifics of the floors. He closed his eyes in the elevator. It didn’t help. But at least Jon was taking them to an animal lab. How much further could bio-hazard labs be?

As the elevator door whispered open, Andy checked for other signs.

None to anything but restrooms.

“What’s in there?” Lizzie asked Jon as they passed a shuttered room.

“Bird Labs. No better spy than a pigeon with a videocam, right?”

The look in her eyes worried Andy, but he didn’t dare smug her.

In Dog Lab, black German Shepherds raced up and down in their pens. One flung itself happily at the fence, while the rest pranced excitedly, a panoply of toys – tennis balls, rubber bones – swirling around them. When Jon patted their heads, they licked his hand.

Andy felt sorry for them. All this for a brain interface to move an electronic toy, same as you’d move your own arm.

“Their IQs are around 85,” Jon said proudly. “They’ll be deployed in warfare ops. Uh ... you *do* know the interface requires surgical implantation?”

Mike’s eyebrows went up. “Oh, really? Gee, I hate needles.”

“Oh, no need to worry! Just one little stick, and you won’t feel a thing afterwards.”

The bored guards were wandering, gazing at wall displays of photo collages. Some of monkeys and dogs, others of humans: numerous brawny Enhanced in athletic poses. Andy recognized his own unsmiling face. A DARPA brag board.

The dark-haired guard glanced from the photo of a black man to Mike. “This guy looks like you.”

Mike grinned. “Guess we all look alike.”

Jon hesitated. “Oh, he didn’t mean that. But the resemblance is—“

Lizzie pivoted and struck the dark-haired one on a cervical pressure point; he went down like a stone. Andy grabbed the other guard’s gun barrel, shoving upright as it fired. The blast was deafening; Andy’s face stung with powder burns. The guard released the gun and knocked Andy flat with one powerful blow.

Andy raised up on his elbow, blinking away stars. Mike pulled him upright.

“Okay?” Mike asked worriedly.

“Yeah.” Andy was relieved to see Lizzie smiling. Both guards lay like felled trees, Dr. Prince unconscious nearby, limp fingers still reaching for his palm phone. “Mike, you always did have the fastest reflexes.”

Lizzie nodded tensely. “Now let’s find that Bioscience Level 5 lab.”

“What about the surveillance cameras?”

“Running a loop,” Mike said, taking off his glasses and tucking them in his shirt pocket. “It’s taken care of. Your turn, Andy.”

“Right.” Snatching up a sub-gun, Andy reconnoitered the hallway. Empty. He exhaled slowly, then closed his eyes. Left, came the pushing in his mind. Opening his eyes, he gestured to Mike and Lizzie to follow. At every turn, he had to close his eyes, but each time the sensation guided him.

Presently he saw a wall emblem, the fluorescent orange triple-crescent circles-on-a-circle bio-hazard symbol. Continuing: LABORATORY WARNING ... BSL-3 ... BSL-4. BSL-5 EXTREME BIOHAZARD. AUTHORIZED PERSONNEL ONLY!

Dixon’s name topped the admittance list.

How long? Andy sminged.

If I find the pathogen immediately, less than fifteen minutes. Lizzie pulled one of the yellow spacesuit-like gowns over her dress.

That's long.

I have to gown and double-glove. She tied a half-mask respirator over her nose and mouth.

It's bird flu, isn't it?

Yes. Don't worry, I'll destroy the rest.

Helplessly, Andy watched her don blue booties and two pairs of gloves, then enter the airlock. The gown sucked against her legs in the negative airflow that kept microscopic particles from being blown out of the lab.

Andy and Mike waited in silence, Mike tense and preoccupied, Andy pacing.

Before long Mike was sweating, his face twisted. *Surveillance trying to come back online. Dunno how much longer I can keep spoofing.*

Can I help?

Dunno. I—

Ghostly electronic devils materialized, screeching and jabbing at them with pitchforks.

Andy's heart thundered. "The alarm!"

Stripping off her yellow gown, Lizzie burst out of the airlock. "I've got it!"

They dashed down the hall, devils chasing them every step of the way. Mike staggered with weariness; Andy got an arm around his shoulders and half-carried him. "Forget the elevator, Lizzie, take the stairs – that door there!"

She flung it open and they started up.

Mike groaned. "Slow down, Andy."

Dixon stood behind them at the bottom of the stairs, a gun in his hand. "Good thing I decided to put in some overtime tonight, eh?" The gun never wavered from the

back of Mike's head. "The jig's up ... Andy, isn't it? Nice try. Now drop the gun. I've no compunctions about blowing out his brains. There's a new upgrade I've been wanting to try."

Andy obeyed. Why couldn't he think of something better? Because his head hurt, and what was there to think of anyway? Dixon had them outmaneuvered.

"Surrender won't help us," Lizzie said. "He loves playing with people's lives. No mercy from the father of the oxytocin bug."

Dixon's expression hardened. "People need supervision. Including you, my dear. I saved the planet from destruction with that virus – not that I expect any thanks. Once I've eliminated you loose ends with my new and improved bug, things will be just—"

Andy shivered with fury. His mind reached out. Like blindsight's pushing sensation, only ... twisting.

Dixon disappeared.

The floor shuddered as if from an earthquake.

Mike blinked. "Wher'd he go?"

Andy grabbed his arm and Lizzie's. "Dunno, but let's vamoose! I'm pretty sure the building's coming down!"



That spring, a young married couple bought a parcel of land near Blackfoot River outside Missoula, Montana. They built a cabin, grew their own food, and kept to themselves, except for a black man who occasionally came to visit.

They had a lovely pond in the back yard, ringed by four bird-feeders, which were visited by thousands of migrating birds every year.

The neighbors minded their own business. It seemed the Christian thing to do.



