Redstone Science Fiction #14
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Redstone Science Fiction #14, July 2011

Editor's Note
Michael Ray

Fiction
The Memory Gatherer
by Morgan Dempsey

0wnz0red
by Cory Doctorow

Essays
Breaking Heinlein's Third Rule: Exercises for Revision
by Sarah Einstein

Cowboys and Aliens and Time-Travel, Oh My! – Tall-Tech Tales from the Weird Wild West
by Henry Cribbs

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And I quote Bob Howe, Secretary of the Science Fiction and Fantasy Writers of America, "Congratulations: the Board of Directors has voted to list Redstone as a qualifying market for short fiction." Indeed.

We are pleased to be recognized by the SFWA as a pro market, but even more pleased for our authors. For many of them their sale to us will allow them to become Associate or Active Members in the major organization in our field, and we are excited for them. We put in the work to get RSF online, but we all know that it pales in comparison to the work each author puts into every story. We're glad we have played a part in the growing success of many fine writers.

We have two more excellent stories for you this month.

Morgan Dempsey is a young writer who really impressed us with her story, The Memory Gatherer. This dystopian story of a young woman's reaction to her harsh life shook us up a bit. And we like that.

Our second story, 0wnz0red by Cory Doctorow, completes the 'trilogy' of stories that I wanted to see reprinted in Redstone SF*. This story really drew me into the world of modern short science fiction and introduced me to Cory Doctorow's work. It is exactly the sort of story I love – using technology to hack our bodies and potentially change everything. I hope that by publishing it here we will encourage a new generation of readers to give it a read. People often ask me what sort of stories I enjoy. Read this and you'll know.

Our second summer contest with Sarah Einstein is in full swing. Take a break from working on your story and read her outstanding craft essay about revising your work, Breaking Heinlein's Third Rule. Trust me, you'll enjoy (and likely benefit from) this one. We're so pleased to have Sarah back on board this summer. She finished her MFA and is moving on to one of the nation's most prestigious writing programs at Ohio University.

Our man Cribbs brings us another excellent essay as well. Some people seem to think that this summer's blockbuster movie, "Cowboys and Aliens" is a unique idea. It's a fun idea for sure, but there is nothing new under the sun. Henry turns his literary eye onto several 'Weird West' stories and lets us know what it's all about.

Thanks for dropping by. I hope that you'll find something here in #14 to enjoy.

Yours,
Michael Ray
Editor, Redstone SF

* 0wnz0red by Cory Doctorow, His Master's Voice by Hannu Rajaniemi, and Who's Afraid of Wolf 359? by Ken MacLeod were probably my three favorite stories of the last ten years, and we have now had the great pleasure of bringing them all to you in RSF. ~MR

The Memory Gatherer
by Morgan Dempsey

For a time, circuitry was the bottleneck, difficult to come by (outside the black market), and Kera had more important things to buy. The protein packs and mineral supplements and occasional bits of real food that manage to land on her table, to be shared with her brother Fyr. Waxed thread to mend what clothes they have left. The couch for Mother when she was still alive, laid out to catch her when she slipped off the bandwagon. Kera raised the couch so rats couldn't nibble at her.

It's much easier these days as the war dwindles, once-empty beaches now dumping grounds for the remains of destroyed AI, scattered circuits of green laced with gold, charred and battered and stinking of ruin. Kera prefers the North Head Cliffs. She climbs down the sheer rock under a full moon, a heat-scattering cloth draped over her back so the Sea Scouts don't find her. Years ago, before Kera was born, sentient machines grew frustrated and war blossomed from the anger. Many of the robots have given up by now, but not all of them.

Dawn rises beyond the cliffside when Kera drops on the sand. It's silent except for the waves lapping the shore clean, over and over, water rushing over the pebbles scattered on the shoreline. Kera picks one up and kisses a prayer into the stone before throwing it into the ocean. Prayer stones should be blessed by a priest first, then washed with fresh water, cleaning desires for God's ears. This is the closest she'll come to the real thing. The southern third of the beach is piled high with gutted chassis and fractured boards. Wind draws the smell closer and Kera binds a greying bandana over her mouth and nose.

It's easy to determine a useless component, ruined by fire and buckshot, but when a component is whole and fried internally it's harder to tell. Smell alone won't help. Kera has memorized the differences in the vast sea of proprietary chips, and works with what she finds. There's no time to wait for the right pieces. If she finds an AX526-multicore instead of a PrG-15cx, she must make do.

Something on the mound of debris moves and she draws her gun without thought. Her creation, it fires both bullets and electromagnets with a burst charge. Fyr wanted to give it a name, but Kera has no desire to name it. For her, naming something admits ownership, admits caring. The gun is only a tool for survival, one she would throw away if she could.

A small hand waves out from behind a pile of debris, skeletal steel, no larger than a child's, and is instantly snatched back by a larger hand. Time passes, and Kera's gaze remains fixed on where the hand emerged from, her gun steady. She shouts that she is armed, but doesn't want trouble. The larger hand emerges, open, unarmed. Another follows, then a head, an old paint can set with two camera eyes.

Kera lowers her gun. The smaller robot emerges, its chassis cobbled together with loving but impoverished hands. The child robot, a little girl, stares at Kera with innocence. A mother and daughter. They must have come to rebuild their father.

So has Kera. They work in silence.

* * *

She doesn't gather her memories first, nor her brother's. There's time for that later. Much later. The first memories will come from her father's old friend, Meron Gethick. They knew one another before the war, joined the battle together. Her father outranks Gethick, posthumously, though ranks are of no real value now, since government and formal military are distant memories to their generation, fables to Kera's.

Gethick is a barrel of a man, white-haired and scarred like an apple forgotten in the orchard dirt. His reading glasses are cracked, indicating he once had the wealth to buy such a luxury, and no longer has it to repair them. His uniform is tacked up on a far wall, brown and mended, hung with medals. One is for surviving the attack which killed Kera's father, but she can't hold it against him.

"I'll admit," he says by way of greeting, "you coming isn't much a surprise."

"Oh?" She asks this with natural shock.

He offers a seat, refusing to take his until Kera takes hers. Such manners are unnecessary, but like the ranks, it's a hint of humanity some cling to with animalistic ferocity. Not that AI can't be patched to do the same, but those are thoughts best left unsaid. Kera smooths down the bland beige dress, the finest dress her mother ever owned. Her mother has been gone almost as long as her father, but Kera still cannot claim the dress as her own. It hangs on her shoulders like a sack.

"Your father loved telling stories about you." Gethick coughs, and something wet slaps against the walls of his lungs, a bit of flesh scraped free by the fumes of burning plastics, shredding soft, organic bodies from within. Between that sound, his pallor, and the handkerchief at hand ready to catch blood and blackness, he has six months on the outside. "You and Fyr both. You kids were the reasons he kept fighting, you know?"

Kera says nothing. Her father never spoke of such things, and the words come as a surprise.

"Mean son of a bitch on the field, don't get me wrong. But he liked to tell stories 'bout the two of you. His favorite was you taking apart a telephone when you were four years, screwdriver and all." Gethick laughs, as though seeing Kera now makes him wonder what her father exaggerated. "Real proud of the brain you got on you. Bragged all the damn time, saying how maybe we were fighting battles now, but you'd invent the thing that'd put down the bots for good."

Kera recalls that day, with the phone. Her fingertips find the scars on her side, persistent reminder of the whipping she received, hard ridges under the thin fabric of her borrowed dress. Her throat swells and her fists clench, but she pushes the rage aside. "I've never heard him tell it," she says, dragging her finger along the worst of the scars, over and over.

“He always said he was working on it, a speech for your kinmaking. Said it’d make a good warning for your husband.”

Tears burn at the edges of her eyes. Not unexpected, but sooner than she anticipated. She twists it to her advantage. “I have always looked forward to my kinmaking.” Her voice wavers suitably.

“What girl doesn’t?” He offers Kera a fresh handkerchief, keeping his own soiled rag clutched in his fist.

She dabs eyes, a melodramatic gesture, but the cloth drinks in real tears. “I would love to hear his speech.”

Gethick looks away from her bare emotion, ill-equipped to deal with it. “I could try to say it for you, though I’m not sure it’d be the same.”

“I have a better idea.” She begins to explain the Memory Gatherer.

* * *

Gethick’s mind is undamaged by the gathering. The Memory Extractor would probably be a better name for it, but a harder sell. She had to lie to him as it was, tell him memories only play on the screen, faded green and watery, there is no mechanism to digitize human thought. That was true, once. His memories of Kera’s father, the particularities of his laugh, his penchant for moonshine and fistfights, his actions on the battlefield, heroic through one lens and terrifying through another; all gently touched by the Gatherer, copied, and stored on a thumb drive. Walking back home, equipment strapped to Kera’s back, she reaches into her pocket and hold the first fragment of her father, tracing its shape with a callused thumb. She recalls the mother and daughter on the beach, searching for the components that once made the little girl’s father. Robots can reproduce, in a way. Two robots can merge fresh installs of their software and build a small chassis to boot it on. Free of experience, free of the burdens of war, free of scars that prolonged data series bring. Kera wonders if the mother had told her child that father was sleeping now, watching them from far off.

```
void death() { while (1) sleep(); }
```

Would she understand it better than a human child could?

The process is slow. Kera’s father had few friends who held enough of him to be of any value. She loads new memories into the simulator as she gathers them, into the blank AI, feeding it data points to build its behavior on. It is months before the machine wakes, self-aware only by the slimmest margins, like little Fyr, so many years ago, an infant in a wooden crate. Like we all were, once.

Every night she goes through the memories collected, playing them out one after the other in the dark. The Father she is growing is loaded on a scattering of hardware, a spill of silicon and wires across a sheet of steel siding supported by a sawhorse at either end. She has not given him a chassis. The burn mark on the back of her left hand, a small, round puckering of skin, reminds her why, should it ever slip her mind. Her thumb rubs idly over the scar.

"Why are you doing this?"

Fyr's voice startles her, and she hides her hand in a flash of shame. She picks up a board and a screwdriver, trying to look busy. "Sorry, what?"

The door frame is too weak for Fyr to lean against it, so he contents himself with standing just inside her room, arms crossed. "Building this thing. Talking to Meron. What do you want? Answers? Revenge?"

"You wouldn't understand." She speaks quickly, with more confidence than she feels. It's the first time someone other than her had asked, but the hundredth time the question had been lain at her feet. She was no closer to an answer, and it made her head swim and her chest ache. "Go away. I need to focus."

"He's dead," Fyr spits. "The only good thing he's done, and he didn't do it soon enough."

Kera drops the screwdriver and all other pretenses of working, taking long, steadying breaths instead. She had never raised her voice against him and it would take a good deal more than this to make her truly angry. Still, there is the dark knot in her chest, throbbing, struggling to free itself.

Fyr studies her from the doorway, scrutinizing the tired stoop in her shoulders, the dry dirt caked into her skin, the lovingly cleaned components laying on her workbench. The Memory Gatherer rests on the table, tipped on its side. "Will it make me forget him?"

Kera faces him fully. There is a cruelty in his eyes, unnatural for his age, for any age. Bile and guilt rise up her throat, and she wishes not for the first time that she had been stronger for him. She wants to say yes, say she can sweep it all away for him, bring him back into this world, beautiful and new. But she has never lied to Fyr and would not start here.

"No," she tells him. "It doesn't work that way."

He shrugs and fades from the doorway. "Dinner's in half an hour."

* * *

It is a year from her first Gathering when the machine speaks. A pile of freshly-acquired materials lay on her primary workbench, with no real organization except the order in which she managed to stuff it into her bag before warmongering robots or looters with bigger guns arrived. She is using a flathead screwdriver to pry apart two boards that have melted together.

“Kera?” His voice stumbles over her name, half-formed and lilting. “I can’t see you.”

The room is dim, shuttered light coming through the gaps in our patchwork roof, glowing grainy against dust in the air. She’ll have to ask Fyr to fix those before the rain season comes. “I haven’t installed optical receptors,” she says automatically. A high snap of plastic and the boards are separate.

“Haven’t what?”

The screwdriver slips from her fingers and lands on the packed dirt floor with a dampened thud. It’s speaking. It’s speaking and it doesn’t realize it’s simply AI. She slips off her chair and pick up the dropped tool, berating herself, she should have thought of that. How would it realize it wasn’t human? How would it think to ask? Everything it knows comes from the memories loaded into it. No visual receptors, no physical data transmitters, nothing. It can hear her, it can speak, and that’s all.

“Sorry,” she mutters. “Bad joke.” She approaches the table it lays strewn across, a sad, twisted rainbow of cables and wires, patched where they had been stripped, ending in bulbous mounds of components, soldered with whatever was handy at the time. She briefly imagines his cooling body splayed on a hospital cot, but drives the thought away.

“What happened?”

There’s such fear in its voice that she wants to pick up a hammer and smash the whole thing to bits. How dare he, she seethes. How <u>dare</u> he. How can that bastard begin to feel fear? All he should feel is shame and guilt. He shouldn’t be reaching out like a child, cold and alone, looking for comfort.

The screwdriver is still in her hand, rubber grip worn long before she got to it. Kera envisions how easy it would be to stab the vocal synthesizer and feed it the worst memories she can gather when it has no way to scream. Feed it what keeps Fyr from returning her hugs. Feed it what keeps her from returning any of the smiles and glances she gets from boys at the market.

Kera draws a breath, regaining focus. The end is more important. Finding out why is more important for her than these swells of rage. She exhales slowly.

“The war,” she says. “You were hurt in battle. Do you remember?” He will remember the battle. It’s one of the first memories he received. How well he compiles the events, given his limited dataset, is another question. “Do you remember anything?”

“I…” The audio synthesizers fumble, halting over words as he comes to them. “I’m not sure. Everything is… scattered. Distant.” It plays a sound like a descending scale. An attempt at a sigh. “I don’t remember my name, Kera. I remember yours. But not mine.”

She leans over the table. *It’s important it believes it’s my father*. She says this in her mind, over and over, and in doing so she remembers pouring water over the prayer stones as a child,

kneeling in the mud and pouring for hours, in days when she still believed. Now she finds water too precious to waste on useless balms for the spirit.

"Kera?"

She runs her fingers over the wires, cold, copper wiring sheathed in polyethylene. No blood, no life, just a dead stream of electrons. "Jason," she whispers, giving him his name. "It's Jason."

* * *

Jason believes everything Kera tells him. He believes he was gravely injured in the battle which actually killed him. That he has been comatose for years, and now he has woken at home, blind, paralyzed, and Kera has been caring for him. His wife has passed, ill with grief. Fyr is at war, but the war is a dwindling series of battles now, humans as the victors. He eats everything through a tube he cannot feel.

Most of this is true, if seen from a certain perspective.

Kera continues giving him memories, more careful now. He must feel as if he is recalling them, as if old events are floating to the surface, not downloading from a flash drive. Thoughts gathered from old drinking buddies, people who met him before Kera was born, before his kinmaking.

Fyr doesn't know yet. Kera hasn't spoken of the secret in her room, locked away, muted when she leaves. The gentle voice that now whispers her to sleep, that does not see the tears she keeps silent, that gives soft utterances of love. She doesn't know where to begin.

Her room is always dim now, the holes in the roof patched against the coming rain, which should be here in about a month or so, washing down the walls of her small home. Kera has started on a new tool, to detect electromagnetic disruptions, with hopes that it will detect robots concealed for attack. She withdraws a fresh set of memories from her pocket to give to her father before she resumes work.

"Thank you, Kera," he says. As the months have passed he has gained control over the vocal synthesizer. He sounds almost as Kera remembers, only not as warm, not as full and round. Hard to say if it is the AI or her memory at fault.

Kera's hand stills, just short of inserting the thumb drive. "For what?"

"For taking care of me." He has no body, no way to move, no eyes to cast down in sadness and self-loathing, but he doesn't need it. "I should be dead. I remember the attack, very well. It'll sound strange, but I can even see my body flying through the air, like I'm watching through someone else's eyes. " He pauses, gathering his thoughts. "There's no real way I survived. If it wasn't for you…"

Her finger loops through a coil of wire and for a moment she is five years old, scared of the thundering market crowd, grasping at her father's hand. He holds her hand gently but with confidence, and his voice drapes a soft cloth over the mass of people, whispering, "Don't worry, sweetheart. Daddy's here. I'll always be here." She remembers turning into his warm body, grasp the leg of his pants, just above the knee, scared, but knowing he would protect her from outside harm.

Always from outside harm.

Kera's hand closes around the twisted coil of copper wiring, blues and reds and yellows woven together, grimy fingers folding into a hard, trembling fist.

"Thank you for caring for me," he says.

* * *

Kera sits in her chair, her gentle weeping the grey rain after a storm. She held in her hand a thumb drive, small and seemingly innocuous, but she knew the truth of it, of the poison it held. The Memory Gatherer lay on the table beside her, one of her dark hairs shed and left behind inside. Her only solace is that she had the forethought to turn off her father's aural receptors.

She still has not asked Fyr for his memories. Her brother isn't necessary for this part. He doesn't care, doesn't need to know. *Why are you doing this*? He wouldn't understand. Her thumb flicks over the metal protrusion, testing a blade for its sharpness.

When Kera finally rises, she moves like a marionette under an ill-practiced hand. She fumbles with switches on what might have become her father's torso, activating his aural receptors, his vocal synthesizers, sliding back the sheath over the USB port.

"Kera? Are you there?"

She traces her finger over the open port, staring at the scar on her hand. "Sorry. I was… somewhere else."

The soft descent of a sigh. "I was beginning to worry," he says. "If something happened to you…"

She wonders if the concern is more for himself than for her. After all, without her, he would be helpless. Without him, she would be… what? Happy? Free? She clutched the memories in her hand. Time without him had given her none of those things. Time with him had given her their ghosts. "Something did happen to me. A long time ago."

"What happened?"

Kera plunges the memories into his mind. "You tell me."

It doesn't happen in an instant, as much as Kera wants it to. The build is slow, dragging through a silence marked only by a spinning hard disk downloading the memories, placing them in the current database, integrating them into the ever-growing neural net. Vocal synthesizers emit spasms of sound. Like pain.

"Is that… me?" Fans whir to cool the taxed processors, the AI unable to organize the data against what it knows. "That can't be. I didn't do this."

"You're really going to deny it?" Kera's words come out in a cold, hard hiss, thick with restraint, a cruel laugh chasing after it. Her vision goes blurry and she blinks away tears. "What did I do to deserve it? And Fyr? What could either of us have done?"

"This can't be right." The AI processes the data against its present set, attempting to integrate in the memories with what it knows of itself. "This can't be me. It just… it can't."

Kera rips the thumb drive from the circuitry, slamming it against the table. "Why did you do it? Tell me!" She chokes on a fresh sob, new tears running after their lost sisters. "How can you sit there and tell me you didn't do it?"

"I don't…" The AI stumbles on the words, smothered in new emotion. "I couldn't have… I would never– Kera, I love you!"

She screams, her mouth fumbling over obscenities which twist and churn into a gritty wail. Her body is stripped raw of reason and she takes the circuitry by the wires, swinging it over her head and smashing it against the table. A shard flies free and catches the roof, cutting a hole in the soft patching, and fresh rain drips on the dirt. She flings the circuitry at the wall, years of work striking the steel walls with a plasticine crack. Half-formed words of panic burst through the vocal synthesizer as it crashes into the floor.

Her screwdriver plunges into the plastic, over and over, her cries playing a staccato rhythm against the sound of everything shattering. Plastic flies through the air, catching her face, her arms, the back of her hand, carving deep, drawing blood, but rage washes over her and she feels nothing. She stabs the hard-packed dirt for several minutes before she realizes there is nothing left to destroy.

Kera tumbles to the ground, gasping like a man once drowned. Rain drips through the new gash in the roof, splattering the back of her freshly-cut hand. The wound bleeds freely, tracing over old scars, fresh water thinning her blood as the dripping rain washes her clean.

Fyr rushes into the room. "What happened? Kera?" He flies to her side, wrapping an arm around her, lifting her up, pulling her close. Over her shoulder, he sees the Memory Gatherer, sees the thumb drive laying on the table beside it. "Oh, God. What did you do?"

She turns her face up, staring past him. He follows her eyes to the destroyed machinery laying on the ground, dust and fragments, years of her life consumed in a flash of rage.

He wipes at the stains on her cheeks, tear tracks caked with dust. ”Come on. Wash up, and we’ll have dinner.” He tugs at her shoulders, helping her to her feet. “It’s just us now. Forget about him, okay? He’s dead now. It’s over.”

Kera stares back at the remains. She wanted to say yes, it’s over. But she has never lied to Fyr, and would not start here.

The End

Morgan Dempsey is a software engineer, currently living in Silicon Valley, California, USA. She blogs at Inkpunks (www.inkpunks.com) and reads slush for Scape (www.scapezine.com). Her fiction is also in Broken Time Blues, an anthology of 1920s speculative fiction. Her personal blog is at www.geardrops.net and she tweets obsessively at www.twitter.com/geardrops.

0wnz0red

by Cory Doctorow

(Editor’s Note: This story first appeared at Salon and was nominated for the Nebula Award for Best Novelette)

Ten years in the Valley, and all Murray Swain had to show for it was a spare tire, a bald patch, and a life that was friendless and empty and maggoty-rotten. His only ever California friend, Liam, had dwindled from a tubbaguts programmer-shaped potato to a living skeleton on his death-bed the year before, herpes blooms run riot over his skin and bones in the absence of any immunoresponse. The memorial service featured a framed photo of Liam at his graduation; his body was donated for medical science.

Liam’s death really screwed things up for Murray. He’d gone into one of those clinical depression spirals that eventually afflicted all the aging bright young coders he’d known during his life in tech. He’d get misty in the morning over his second cup of coffee and by the midafternoon blood-sugar crash, he’d be weeping silently in his cubicle, clattering nonsensically at the keys to disguise the disgusting snuffling noises he made. His wastebasket overflowed with spent tissues and a rumor circulated among the evening cleaning-staff that he was a compulsive masturbator. The impossibility of the rumor was immediately apparent to all the other coders on his floor who, pr0n-hounds that they were, had explored the limits and extent of the censoring proxy that sat at the headwaters of the office network. Nevertheless, it was gleefully repeated in the collegial fratmosphere of his workplace and wags kept dumping their collections of conference-snarfed hotel-sized bottles of hand-lotion on his desk.

The number of bugs per line in Murray’s code was 500 percent that of the overall company average. The QA people sometimes just sent his code back to him (From: qamanager@globalsemi.com To: mswain@globalsemi.com Subject: Your code… Body: …sucks) rather than trying to get it to build and run. Three weeks after Liam died, Murray’s team leader pulled his commit privileges on the CVS repository, which meant that he had to grovel with one of the other coders when he wanted to add his work to the project.

Two months after Liam died, Murray was put on probation.

Three months after Liam died, Murray was given two weeks' leave and an e-mail from HR with contact info for an in-plan shrink who could counsel him. The shrink recommended Cognitive Therapy, which he explained in detail, though all Murray remembered ten minutes after the session was that he'd have to do it every week for years, and the name reminded him of Cognitive Dissonance, which was the name of Liam's favorite stupid Orange County garage band.

Murray returned to Global Semiconductor's Mountain View headquarters after three more sessions with the shrink. He badged in at the front door, at the elevator, and on his floor, sat at his desk and badged in again on his PC.

From: tvanya@globalsemi.com To: mswain@globalsemi.com Subject: Welcome back! Come see me… Body: …when you get in.

Tomas Vanya was Murray's team lead, and rated a glass office with a door. The blinds were closed, which meant: dead Murray walking. Murray closed the door behind him and sighed a huge heave of nauseated relief. He'd washed out of Silicon Valley and he could go home to Vancouver and live in his parents' basement and go salmon fishing on weekends with his high-school drinking buds. He didn't exactly love Global Semi, but shit, they were number three in a hot, competitive sector where Moore's Law drove the cost of microprocessors relentlessly downwards as their speed rocketed relentlessly skyward. They had four billion in the bank, a healthy share price, and his options were above water, unlike the poor fucks at Motorola, number four and falling. He'd washed out of the nearly-best, what the fuck, beat spending his prime years in Hongcouver writing government-standard code for the Ministry of Unbelievable Dullness.

Even the number-two chair in Tomas Vanya's office kicked major ergonomic azz. Murray settled into it and popped some of the controls experimentally until the ess of his spine was cushioned and pinioned into chiropractically correct form. Tomas unbagged a Fourbucks Morning Harvest muffin and a venti coconut Frappucino and slid them across his multi-tiered Swedish Disposable Moderne desque.

"A little welcome-back present, Murray," Tomas said. Murray listened for the sound of a minimum-wage security guard clearing out his desk during this exit-interview-cum-breakfast-banquet. He wondered if Global Semi would forward-vest his options and mentally calculated the strike price minus the current price times the number of shares times the conversion rate to Canadian Pesos and thought he could maybe put down 25 percent on a two bedroom in New Westminster.

"Dee-licious and noo-tritious," Murray said and slurped at the frappe.

"So," Tomas said. "So."

Here it comes, Murray thought, and sucked up a brain-freezing mouthful of frou-frou West Coast caffeine delivery system. G0nz0red. Fi0red. Sh17canned. Thinking in leet-hacker crap made it all seem more distant.

“It’s really great to see you again,” Tomas said. “You’re a really important part of the team here, you know?”

Murray restrained himself from rolling his eyes. He was fired, so why draw it out? There’d been enough lay-offs at Global Semi, enough boom and bust and bust and bust that it was a routine, they all knew how it went.

But though Murray was an on Air Canada jet headed for Vangroover, Tomas wasn’t even on the damned script. “You’re sharp and seasoned. You can communicate effectively. Most techies can’t write worth a damn, but you’re good. It’s rare.”

Ah, the soothing sensation of smoke between one’s buttocks. It was true that Murray liked to write, but there wasn’t any money in it, no glory either. If you were going to be a writer in the tech world, you’d have to be –

“You’ve had a couple weeks off to reassess things, and we’ve been reassessing, too. Coding, hell, most people don’t do it for very long. Especially assembler, Jesus, if you’re still writing assembler after five years, there’s something, you know, *wrong*. You end up in management or you move horizontally. Or you lose it.” Tomas realized that he’d said the wrong thing and blushed.

Aw, shit.

“Horizontal movement. That’s the great thing about a company this size. There’s always somewhere you can go when you burn out on one task.”

No, no, no.

“The Honorable Computing initiative is ready for documentation, Murray. We need a tech writer who can really *nail it*.”

A tech writer. Why not just break his goddamned fingers and poke his eyes out? Never write another line of code, never make the machine buck and hum and make his will real in the abstract beauty of silicon? Tech writers were coders’ janitors, documenting the plainly self-evident logic of APIs and code-structures, niggling over punctuation and grammar and frigging stylebooks, like any of it *mattered* — human beings could parse English, even if it wasn’t well-formed, even if you had a comma-splice or a dangling participle.

“It’s a twelve month secondment, a change of pace for you and a chance for us to evaluate your other strengths. You go to four weeks’ vacation and we accelerate your vesting and start you with a new grant at the same strike price, over 24 months.”

Murray did the math in his head, numbers dancing. Four weeks’ vacation — that was three years ahead of schedule, not that anyone that senior ever used his vacation days, but you could bank them for retirement or, ahem, exit strategy. The forward vesting meant that he could walk out

and fly back to Canada in three weeks if he hated it and put *30* percent down on a two-bedroom in New West.

And the door was closed and the blinds were drawn and the implication was clear. Take this job or shove it.

He took the job.

A month later he was balls-deep in the documentation project and feeling, you know, not horrible. The Honorable Computing initiative was your basic Bond-villain world-domination horseshit, of course, but it was technically sweet and it kept him from misting over and bawling. And they had cute girls on the documentation floor, liberal arts/electrical engineering double-majors with abs you could bounce a quarter off of who were doing time before being promoted up to join the first cohort of senior female coders to put their mark on the Valley.

He worked late most nights, only marking the passing of five PM by his instinctive upwards glance as all those fine, firm rear ends walked past his desk on their way out of the office. Then he went into night mode, working by the glow of his display and the emergency lights until the custodians came in and chased him out with their vacuum cleaners.

One night, he was struggling to understand the use-cases for Honorable Computing when the overhead lights flicked on, shrinking his pupils to painful pinpricks. The cleaners clattered in and began to pointedly empty the wastebins. He took the hint, grabbed his shoulderbag and staggered for the exit, badging out as he went.

His car was one of the last ones in the lot, a hybrid Toyota with a lot of dashboard geek-toys like a GPS and a back-seat DVD player, though no one ever rode in Murray's back seat. He'd bought it three months before Liam died, cashing in some shares and trading in the giant gas-guzzling SUV he'd never once taken off-road.

As he aimed his remote at it and initiated the cryptographic handshake — i.e., unlocked the doors — he spotted the guy leaning against the car. Murray's thumb jabbed at the locking button on the remote, but it was too late: the guy had the door open and he was sliding into the passenger seat.

In the process of hitting the remote's panic button, Murray managed to pop the trunk and start the engine, but eventually his thumb mashed the right button and the car's lights strobed and the horn blared. He backed slowly towards the office doors, just as the guy found the dome-light control and lit up the car's interior and Murray got a good look at him.

It was Liam.

Murray stabbed at the remote some more and killed the panic button. Jesus, who was going to respond at this hour in some abandoned industrial park in the middle of the Valley anyway? The limp-dick security guard? He squinted at the face in the car.

Liam. Still Liam. Not the skeletal Liam he'd last seen rotted and intubated on a bed at San Jose General. Not the porcine Liam he'd laughed with over a million late-night El Torito burritos. A fit, healthy, *young* Liam, the Liam he'd met the day they both started at Global Semi at adjacent desks, Liam fresh out of Cal Tech and fit from his weekly lot-hockey game and his weekend dirtbike rides in the hills. Liam-prime, or maybe Liam's younger brother or something.

Liam rolled down the window and struck a match on the passenger-side door, then took a Marlboro Red from a pack in his shirt pocket and lit it. Murray walked cautiously to the car, his thumb working on his cellphone, punching in the numbers 9-1-1 and hovering over "SEND." He got close enough to see the scratch the match-head had left on the side-panel and muttered "*fuck*" with feeling.

"Hey dirtbag, you kiss your mother with that mouth?" Liam said. It *was* Liam.

"You kiss *your* mother after I'm through with her mouth?" Murray said, the rote of old times. He gulped for air.

Liam popped the door and got out. He was ripped, bullish chest and cartoonish wasp-waist, rock-hard abs through a silvery club-shirt and bulging thighs. A body like that, it's a full-time job, or so Murray had concluded after many failed get-fit initiatives involving gyms and retreats and expensive home equipment and humiliating early-morning jogs through the sidewalk-free streets of Shallow Alto.

"Who the fuck are you?" Murray said, looking into the familiar eyes, the familiar smile-lines and the deep wrinkle between Liam's eyes from his concentration face. Though the night was cool, Murray felt runnels of sweat tracing his spine, trickling down between his buttocks.

"You know the answer, so why ask? The question isn't who, it's *how*. Let's drive around a little and I'll tell you all about it."

Liam clapped a strong hand on his forearm and gave it a companionable squeeze. It felt good and real and human.

"You can't smoke in my car," Murray said.

"Don't worry," Liam said. "I won't exhale."

Murray shook his head and went around to the driver's side. By the time he started the engine, Liam had his seatbelt on and was poking randomly at the on-board controls. "This is pretty rad. You told me about it, I remember, but it sounded stupid at the time. Really rad." He brought up the MP3 player and scrolled through Murray's library, adding tracks to a mix, cranking up the opening crash of an old, old, old punk Beastie Boys song. "The speakers are for shit, though!" he hollered over the music.

Murray cranked the volume down as he bounced over the speed bumps, badged out of the lot, and headed for the hills, stabbing at the GPS to bring up some roadmaps that included the private roads way up in the highlands.

“So, do I get two other ghosts tonight, Marley, or are you the only one?”

Liam found the sunroof control and flicked his smoke out into the road. “Ghost, huh? I’m meat, dude, same as you. Not back from the dead, just back from the *mostly dead*.” He did the last like Billy Crystal as Miracle Max in “The Princess Bride,” one of their faves. “I’ll tell you all about it, but I want to catch up on your shit first. What are you working on?”

“They’ve got me writing docs,” Murray said, grateful of the car’s darkness covering his blush.

“Awwww,” Liam said. “You’re shitting me.”

“I kinda lost it,” Murray said. “Couldn’t code. About six months ago. After.”

“Ah,” Liam said.

“So I’m writing docs. It’s a sideways promotion and the work’s not bad. I’m writing up Honorable Computing.”

“What?”

“Sorry, it was after your time. It’s a big deal. All the semiconductor companies are in on it: Intel, AMD, even Motorola and Hitachi. And Microsoft — they’re hardcore for it.”

“So what is it?”

Murray turned onto a gravel road, following the tracery on the glowing GPS screen as much as the narrow road, spiraling up and up over the sparse lights of Silicon Valley. He and Liam had had a million bullshit sessions about tech, what was vaporware and what was killer, and now they were having one again, just like old times. Only Liam was dead. Well, if it was time for Murray to lose his shit, what better way than in the hills, great tunes on the stereo, all alone in the night?

Murray was warming up to the subject. He’d wanted someone he could really chew this over with since he got reassigned, he’d wanted Liam there to key off his observations. “OK, so, the Turing Machine, right? Turing’s Universal Machine. The building-block of modern computation. In Turing’s day, you had all these specialized machines: a machine for solving quadratics, a machine for calculating derivatives, and so on. Turing came up with the idea of a machine that could configure itself to be any specialized machine, using symbolic logic: software. Included in the machines that you can simulate in a Turing Machine is another Turing Machine, like Java or VMWare. With me?”

“With you.”

“So this gives rise to a kind of existential crisis. When your software is executing, how does it know what its execution environment is? Maybe it’s running on a Global Semi Itanium clone at 1.6 gigahertz, or maybe it’s running on a model of that chip, simulated on a Motorola G5 RISC processor.”

“Got it.”

“Now, forget about that for a sec and think about Hollywood. The coked-up Hollyweird fatcats hate Turing Machines. I mean, they want to release their stuff over the Internet, but they want to deliver it to you in a lockbox. You get to listen to it, you get to watch it, but only if they say so, and only if you’ve paid. You can buy it over and over again, but you can never own it. It’s scrambled — encrypted — and they only send you the keys when you satisfy a license server that you’ve paid up. The keys are delivered to a secure app that you can’t fuxor with, and the app locks you out of the video card and the sound card and the drive while it’s decrypting the stream and showing it to you, and then it locks everything up again once you’re done and hands control back over to you.”

Liam snorted. “It is to laugh.”

“Yeah, I know. It’s bullshit. It’s Turing Machines, right? When the software executes on your computer, it has to rely on your computer’s feedback to confirm that the video card and the sound card are locked up, that you’re not just feeding the cleartext stream back to the drive and then to 10,000,000 pals online. But the ‘computer’ it’s executing on could be simulated inside another computer, one that you’ve modified to your heart’s content. The ‘video card’ is a simulation; the ‘sound card’ is a simulation. The computer is a brain in a bottle, it’s in the Matrix, it can’t trust its senses because you’re in control, it’s a Turing Machine nested inside another Turing Machine.”

“Like Descartes.”

“What?”

“You gotta read your classics, bro. I’ve been catching up over the past six months or so, doing a *lot* of reading. Mostly free e-books from the Gutenberg Project. Descartes’ “Meditations” are some heavy shiznit. Descartes starts by saying that he wants to figure out some stuff about the world, but he can’t, right, because in order to say stuff about the world, he needs to trust his senses, but his senses are wrong all the time. When he dreams, his senses deliver full-on THX all-digital IMAX, but none of it’s really *there*. How does he know when he’s dreaming or when he’s awake? How does he know when he’s experiencing something or imagining it? How does he know he’s not a brain in a jar?”

“So, how does he know?” Murray asked, taking them over a reservoir on a switchback road, moonlight glittering over the still water, occulted by fringed silhouettes of tall California pines.

“Well, that’s where he pulls some religion out of his ass. Here’s how it goes: God is good, because part of the definition of God is goodness. God made the world. God made me. God

made my senses. God made my senses *so that I could experience the goodness of his world.* Why would God give me bum senses? QED, I can trust my senses."

"It *is* like Descartes," Murray said, accelerating up a new hill.

"Yeah?" Liam said. "Who's God, then?"

"Crypto," Murray said. "Really good, standards-defined crypto. Public ciphersystems whose details are published and understood. AES, RSA, good crypto. There's a signing key for each chip fab — ours is in some secret biometrics-and-machineguns bunker under some desert. That key is used to sign *another* key that's embedded in a tamper-resistant chip –"

Liam snorted again.

"No, really. Not tamper-*proof,* obviously, but tamper-*resistant* — you'd need a tunneling microscope or a vat of Freon to extract the keys from the chip. And every chip has its own keys, so you'd need to do this for every chip, which doesn't, you know, *scale.* So there's this chip full of secrets, they call the Fritz chip, for Fritz Hollings, the Senator from Disney, the guy who's trying to ban computers so that Hollywood won't go broke. The Fritz chip wakes up when you switch on the machine, and it uses its secret key to sign the operating system — well, the boot-loader and the operating system and the drivers and stuff — so now you've got a bunch of cryptographic signatures that reflect the software and hardware configuration of your box. When you want to download Police Academy *n,* your computer sends all these keys to Hollywood central, *attesting* to the operating environment of your computer. Hollywood decides on the fly if it wants to trust that config, and if it does, it encrypts the movie, using the keys you've sent. That means that you can only unscramble the movie when you're running that Fritz chip, on that CPU, with that version of the OS and that video driver and so on."

"Got it: so if the OS and the CPU and so on are all 'Honorable'" — Liam described quote-marks with his index fingers — "then you can be sure that the execution environment is what the software expects it to be, that it's not a brain in a vat. Hollywood movies are safe from Napsterization."

They bottomed out on the shore of the reservoir and Murray pulled over. "You've got it."

"So basically, whatever Hollywood says, goes. You can't fake an interface, you can't make any uses that they don't authorize. You know that these guys sued to make the VCR illegal, right? You can't wrap up an old app in a compatibility layer and make it work with a new app. You say Microsoft loves this? No fucking wonder, dude — they can write software that won't run on a computer running Oracle software. It's your basic Bond-villain –"

"– world-domination horseshit. Yeah, I know."

Liam got out of the car and lit up another butt, kicked loose stones into the reservoir. Murray joined him, looking out over the still water.

“Ring Minus One,” Liam said, and skipped a rock over the oily-black surface of the water, getting four long bounces out of it.

“Yeah.” Murray said. Ring Zero, the first registers in the processor, was where your computer checked to figure out how to start itself up. Compromise Ring Zero and you can make the computer do anything — load an alternate operating system, turn the whole box into a brain-in-a-jar, executing in an unknown environment. Ring Minus One, well, that was like God-code, space on another, virtual processor that was unalterable, owned by some remote party, by LoCal and its entertainment giants. Software was released without any copy-prevention tech because everyone knew that copy-prevention tech *didn’t work.* Nevertheless, Hollywood was always chewing the scenery and hollering, they just didn’t believe that the hairfaces and ponytails didn’t have some seekrit tech that would keep their movies safe from copying until the heat death of the universe or the expiry of copyright, whichever came last.

“You run this stuff,” Liam said, carefully, thinking it through, like he’d done before he got sick, murdered by his need to feed speedballs to his golden, tracked-out arm. “You run it and while you’re watching a movie, Hollywood 0wnz your box.” Murray heard the zero and the zee in 0wnz. Hacker-speak for having total control. No one wants to be 0wnz0red by some teenaged script-kiddie who’s found some fresh exploit and turned it loose on your computer.

“In a nutsac. Gimme a butt.”

Liam shook one out of the pack and passed it to Murray, along with a box of Mexican strike-anywhere matches. “You’re back on these things?” Liam said, a note of surprise in his voice.

“Not really. Special occasion, you being back from the dead and all. I’ve always heard that these things’d kill me, but apparently being killed isn’t so bad — you look great.”

“Artful segue, dude. You must be burning up with curiosity.”

“Not really,” Murray said. “Figgered I’m hallucinating. I haven’t hallucinated up until now, but back when I was really down, you know, clinical, I had all kinds of voices muttering in my head, telling me that I’d fucked up, it was all fucked up, crash the car into the median and do the world a favor, whatever. You get a little better from that stuff by changing jobs, but maybe not all the way better. Maybe I’m going to fill my pockets with rocks and jump in the lake. It’s the next logical step, right?”

Liam studied his face. Murray tried to stay deadpan, but he felt the old sadness that came with the admission, the admission of guilt and weakness, felt the tears pricking his eyes. “Hear me out first, OK?” Liam said.

“By all means. It’d be rude not to hear you out after you came all the way here from the kingdom of the dead.”

“Mostly dead. Mostly. Ever think about how all the really good shit in your body — metabolism, immunoresponse, cognition — it’s all in Ring Minus One? Not user-accessible? I mean, why is it that something like wiggling your toes is under your volitional control, but your memory isn’t?”

“Well, that’s complicated stuff — heartbeat, breathing, immunoresponse, memory. You don’t want to forget to breathe, right?”

Liam hissed a laugh. “Horse-sheeit,” he drawled. “How complicated is moving your arm? How many muscle-movements in a smile? How many muscle-movements in a heartbeat? How complicated is writing code versus immunoresponse? Why when you’re holding your breath can’t you hold it until you don’t want to hold it anymore? Why do you have to be a fucking Jedi Master to stop your heart at will?”

“But the interactions –”

“More horseshit. Yeah, the interactions between brain chemistry and body and cognition and metabolism are all complicated. I was a speed-freak, I know all about it. But it’s not any more complicated than any of the other complex interactions you master every day — wind and attack and spin when someone tosses you a ball; speed and acceleration and vectors when you change lanes; don’t even get me started on what goes on when you season a soup. No, your body just isn’t *that* complicated — it’s just hubris that makes us so certain that our meat-sacks are transcendently complex.

“We’re simple, but all the good stuff is 0wned by your autonomic systems. They’re like conditional operators left behind by a sloppy coder: while x is true, do y. We’ve only had the vaguest idea what x is, but we’ve got a handle on y, you betcha. Burning fat, for example.” He prodded Murray’s gut-overhang with a long finger. Self-consciously, Murray tugged his JavaOne gimme jacket tighter.

“For forty years now, doctors have been telling us that the way to keep fit is to exercise more and eat less. That’s great fucking advice, as can be demonstrated by the number of trim, fit residents of Northern California that can be found waddling around any shopping mall off Interstate 101. Look at exercise, Jesus, what could be stupider? Exercise doesn’t burn fat, exercise just satisfies the condition in which your body is prepared to burn fat off. It’s like a computer that won’t boot unless you restart it twice, switch off the monitor, open the CD drive and stand on one foot. If you’re a luser, you do all this shit every time you want to boot your box, but if you’re a leet hax0r like you and me, you just figure out what’s wrong with the computer and *fix it.* You don’t sacrifice a chicken twice a day, you 0wn the box, so you make it dance to your tune.

“But your meat, it’s not under your control. You know you have to exercise for 20 minutes before you start burning any fat at all? In other words, the first twenty minutes are just a goddamned waste of time. It’s sacrificing a chicken to your metabolism. Eat less, exercise more is a giant chicken-sacrifice, so I say screw it. I say, you should be super-user in your own body. You should be leet as you want to be. Every cell in your body should be end-user modifiable.”

Liam held his hands out before them, then stretched and stretched and stretched the fingers, so that each one bent over double. “Triple jointed, metabolically secure, cognitively large and *in charge*. I 0wn, dude.”

Liam fished the last cig out of the pack, crumpled it and tucked it into a pocket. “Last one,” he said. “Wanna share?”

“Sure,” Murray said, dazedly. “Yeah,” he said, taking the smoke and bringing it to his lips. The tip, he realized too late, was dripping with saliva. He made a face and handed it back to Liam. “Aaagh! You juiced the filter!”

“Sorry,” Liam said, “talking gets my spit going. Where was I? Oh, yeah, I 0wn. Want to know how it happened?”

“Does it also explain how you ended up not dead?”

“Mostly dead. Indeed it does.”

Murray walked back to the car and lay back on the hood, staring at the thin star-cover and the softly swaying pine-tops. He heard Liam begin to pace, heard the cadence of Liam’s thinking stride, the walk he fell into when he was on a roll.

“Are you sitting comfortably?” Liam said. “Then I shall begin.”

The palliatives on the ward were abysmal whiners, but they were still better than the goddamned church volunteers who came by to patch-adams at them. Liam was glad of the days when the dementia was strong, morphine days when the sun rose and set in a slow blink and then it was bedtime again.

Lucky for him, then, that lucid days were fewer and farther between. Unlucky for him that his lucid days, when they came, were filled with the G-Men.

The G-Men had come to him in the late days of his tenure on the palliative ward. They’d wheeled him into a private consultation room and given him a cigarette that stung the sores on his lips, tongue and throat. He coughed gratefully.

“You must be the Fed,” Liam said. “No one else could green-light indoor smoking in California.” Liam had worked for the Fed before. Work in the Valley and you end up working for the Fed, because when the cyclic five-year bust arrives, the only venture capital that’s liquid in the U.S. is military research green — khaki money. He’d been seconded twice to biometrics-and-machineguns bunkers where he’d worked on need-to-know integration projects for Global Semi’s customers in the Military-Industrial Simplex.

The military and the alphabet soup of Fed cops gave birth to the Valley. After WWII, all those shipbuilder engineers and all those radar engineers and all those radio engineers and the tame

academics at Cal Tech and Cal and Stanford sorta congealed, did a bunch of startups and built a bunch of crap their buds in the Forces would buy.

Khaki money stunted the Valley. Generals didn't need to lobby in Congress for bigger appropriations. They just took home black budgets that were silently erased from the books, aerosolized cash that they misted over the eggheads along Highway 101. Two generations later, the Valley was filled with techno-determinists, swaggering nerd squillionaires who were steadfastly convinced that the money would flow forever and ever amen.

Then came Hollywood, the puny $35 billion David that slew the $600 billion Goliath of tech. They bought Congresscritters, had their business-models declared fundamental to the American way of life, extended copyright ad [inifinitum|nauseam] and generally kicked the shit out of tech in DC. They'd been playing this game since 1908, when they sued to keep the player piano off the market, and they punched well above their weight in the legislative ring. As the copyright police began to crush tech companies throughout the Valley, khaki money took on the sweet appeal of nostalgia, strings-free cash for babykiller projects that no one was going to get sued over.

The Feds that took Liam aside that day could have been pulled from a fiftieth anniversary revival of "Nerds and Generals." Clean-cut, stone-faced, prominent wedding-bands. The Feds had never cared for Liam's jokes, though it was his trackmarks and not his punchlines that eventually accounted for his security clearance being yanked. These two did not crack a smile as Liam wheezed out his pathetic joke.

Instead, they introduced themselves gravely. Col. Gonzalez — an MD, with caduceus insignia next to his silver birds — and Special Agent Fredericks. Grateful for his attention, they had an offer to make him.

"It's experimental, and the risks are high. We won't kid you about that."

"I appreciate that," Liam wheezed. "I like to live dangerously. Give me another smoke, willya?"

Col. Gonzalez lit another Marlboro Red with his brass Zippo and passed him a sheaf of papers. "You can review these here, once we're done. I'm afraid I'll have to take them with me when we go, though."

Liam paged through the docs, passing over the bio stuff and nodding his head over the circuit diagrams and schematics. "I give up," he said. "What does it all do?"

"It's an interface between your autonomic processes and a microcontroller."

Liam thought about that for a moment. "I'm in," he said.

Special Agent Fredericks' thin lips compressed a hair and his eyes gave the hintiest hint of a roll. But Col. Gonzalez nodded to himself. "All right. Here's the protocol: tomorrow, we give you a bug. It's a controlled mutagen that prepares your brainstem so that it emits and receives weak

electromagnetic fields that can be manipulated with an external microcontroller. In subjects with effective immunoresponse, the bug takes less than one percent of the time –"

"But if you're dying of AIDS, that's not a problem," Liam said and smiled until some of the sores at the corners of his mouth cracked and released a thin gruel of pus. "Lucky fucking me."

"You grasp the essentials," the Colonel said. "There's no surgery involved. The interface regulates immunoresponse in the region of the insult to prevent rejection. The controller has a serial connector that connects to a PC that instructs it in respect of the governance of most bodily functions."

Liam smiled slantwise and butted out. "God, I'd hate to see the project you developed this shit for. Zombie soldiers, right? You can tell me, I've got clearance."

Special Agent Fredericks shook his head. "Not for three years, you haven't. And you never had clearance to get the answer to that question. But once you sign here and here and here, you'll *almost* have clearance to get *some* of the answers." He passed a clipboard to Liam.

Liam signed, and signed, and signed. "Autonomic processes, right?"

Col. Gonzalez nodded. "Correct."

"Including, say, immunoresponse?"

"Yes, we've had very promising results in respect of the immune system. It was one of the first apps we wrote. Modifies the genome to produce virus-hardened cells and kick-starts production of new cells."

"Yeah, until some virus out-evolves it," Liam said. He knew how to debug vaporware.

"We issue a patch," the Colonel said.

"I write good patches," Liam said.

"We know," Special Agent Fredericks said, and gently prized the clipboard from his fingers.

* * *

The techs came first, to wire Liam up. The new bug in his system broadened his already-exhaustive survey of the ways in which the human body can hurt. He squeezed his eyes tight against the morphine rush and lazily considered the possibility of rerouting pain to a sort of dull tickle.

The techs were familiar Valley-dwellers, portly and bedecked with multitools and cellular gear and wireless PDAs. They handled him like spoiled meat, with gloves and wrinkled noses, and talked shop over his head to one another.

Colonel Gonzalez supervised, occasionally stepping away to liaise with the hospital's ineffectual medical staff.

A week of this — a week of feeling like his spine was working its way out of his asshole, a week of rough latex hands and hacker jargon — and he was wheeled into a semi-private room, surrounded by *louche* oatmeal-colored commodity PCs — no keyboards or mice, lest he get the urge to tinker.

The other bed was occupied by Joey, another Silicon Valley needle-freak, a heroin addict who'd been a design engineer for Apple, figuring out how to cram commodity hardware into stylish gumdrop boxen. Joey and Liam croaked conversation between themselves when they were both lucid and alone. Liam always knew when Joey was awake by the wet hacking coughs he wrenched out of his pneumonia-riddled lungs. Alone together, ignored by the mad scientists who were hacking their bodies, they struck up a weak and hallucinogenic camaraderie.

"I'm not going to sleep," Joey said, in one timeless twilight.

"So don't sleep, shit," Liam said.

"No, I mean, ever. Sleep, it's like a third of your life, 20, 30 years. What's it good for? It resets a bunch of switches, gives your brain a chance to sort through its buffers, a little oxygenation for your tissues. That stuff can all take place while you're doing whatever you feel like doing, hiking in the hills or getting laid. Make 'em into cron jobs and nice them down to the point where they just grab any idle cycles and do their work incrementally."

"You're crazy. I like to sleep," Liam said.

"Not me. I've slept enough in this joint, been on the nod enough, I never want to sleep another minute. We're getting another chance, I'm not wasting a minute of it." Despite the braveness of his words, he sounded like he was half-asleep already.

"Well, that'll make *them* happy. All part of a good super-soldier, you know."

"Now who's crazy?"

"You don't believe it? They're just getting our junkie asses back online so they can learn enough from us to field some mean, lean, heavily modified fighting-machines."

"And then they snuff us. You told me that this morning. Yesterday? I still don't believe it. Even if you're right about why they're doing this, they're still going to want us around so they can monitor the long-term effects."

"I hope you're right."

"You know I am."

Liam stared into the ceiling until he heard Joey's wet snores, then he closed his eyes and waited for the fever dreams.

Joey went critical the next day. One minute, he was snoring away in bed while Liam watched a daytime soap with headphones. The next minute, there were twenty people in the room: nurses, doctors, techs, even Col. Gonzalez. Joey was doing the floppy dance in the next bed, the OD dance that Liam had seen once or twice, danced once or twice on an Emergency Room floor, his heart pounding the crystal meth mambo.

Someone backhanded Liam's TV and it slid away on its articulated arm and yanked the headphones off his head, ripping open the scabs on the slowly healing sores on his ears. Liam stifled a yelp and listened to the splashing sounds of all those people standing ankle-deep in something pink and bad-smelling, and Liam realized it was watery blood and he pitched forward and his empty stomach spasmed, trying to send up some bile or mucous, clicking on empty.

Colonel Gonzales snapped out some orders and two techs abandoned their fretting over one of the computers, yanked free a tangle of roll-up, rubberized keyboards and trackballs and USB cables, piled them on the side of Liam's gurney, snapped up the guard rails and wheeled him out of the room.

They crashed through a series of doors before hitting a badgepoint. One tech thought he'd left his badge back in the room on its lanyard (he hadn't — he'd dropped it on the gurney and Liam had slipped it under the sheets), the other one wasn't sure if his was in one of his many pockets. As they frisked themselves, Liam stole his skeletal hand out from under the covers, a hand all tracked out with collapsed IV veins and yellowing fingernails, a claw of a hand.

The claw shook as Liam guided it to a keyboard, stole it under the covers, rolled it under the loose meat of his thigh.

* * *

"Need to know?" Liam said, spitting the words at Col. Gonzalez. "If I don't need to know what happened to Joey, who the fuck does?"

"You're not a medical professional, Liam. You're also not cleared. What happened to Joey was an isolated incident, nothing to worry about."

"Horseshit! You can tell me what happened to Joey or not, but I'll find out, you goddamned betcha."

The Colonel sighed and wiped his palms on his thighs. He looked like shit, his brush-cut glistening with sweat and scalp-oil, his eyes bagged and his youthful face made old with exhaustion lines. It had been two hours since Joey had gone critical — two hours of lying still with the keyboard nestled under his thigh, on the gurney in the a locked room, until they came for him again. "I have a lot of work to do yet, Liam. I came to see you as a courtesy, but I'm afraid that the courtesy is at a close." He stood.

“Hey!” Liam croaked after him. “Gimme a fucking cigarette, will you?”

Once the Colonel was gone, Liam had the run of the room. They’d mopped it out and disinfected it and sent Joey’s corpse to an Area 51 black ops morgue for gruesome autopsy, and there was only half as much hardware remaining, all of it plugged back into the hard pucker of skin on the back of Liam’s neck.

Cautiously, Liam turned himself so that the toes of one foot touched the ground. Knuckling his toes, he pushed off towards the computers, the gurney’s wheels squeaking. Painfully, arthritically, he inched to the boxes, then plugged in and unrolled the keyboard.

He hit the spacebar and got rid of the screen-saver, brought up a login prompt. He’d been stealthily shoulder-surfing the techs for weeks now, and had half a dozen logins in his brain. He tapped out the login/pass combination and he was in.

The machine was networked to a CVS repository in some bunker, so the first thing he did was login to the server and download all the day’s commits, then he dug out the READMEs. While everything was downloading, he logged into the tech’s e-mail account and found Col. Gonzalez’s account of Joey’s demise.

It was encrypted with the group’s shared key as well as the tech’s key, but he’d shoulder-surfed both, and after three tries, he had cleartext on the screen.

Hydrostatic shock. The membranes of all of Joey’s cells had ruptured simultaneously, so that he’d essentially burst like a bag of semi-liquid Jell-O. Preliminary indications were that the antiviral cellular modifications had gone awry due to some idiosyncrasy of Joey’s “platform” — his physiology, in other words — and that the “fortified” cell-membranes had given way disastrously and simultaneously.

A ghoulish giggle escaped Liam’s lips. Venture capitalists liked to talk about “liquidity events” — times in the life of a portfolio company when the investors get to cash out: acquisition and IPO, basically. Liam had always joked that the VCs needed adult diapers to cope with their liquidity events, but now he had a better one. Joey had experienced the ultimate liquidity event.

The giggle threatened to rise into a squeal as he contemplated a liquidity event of his own, so he swallowed it and got into the READMEs and the source code.

He wasn’t a biotech, wasn’t a medical professional, but neither were the coders who’d been working on the mods that were executing on his “platform” at that very moment. In their comments and data-structures and READMEs, they’d gone to great pains to convert medical jargon to geekspeak, so that Liam was actually able to follow most of it.

One thing he immediately gleaned is that his interface was modifying his cells to be virus-hardened as slowly as possible. They wanted a controlled experiment, data on every stage of the recovery — if a recovery was indeed in the cards.

Liam didn't want to wait. He didn't even have to change the code — he just edited a variable in the config file and respawned the process. Where before he'd been running at a pace that would reverse the course of HIV in his body in a space of three weeks, now he was set to be done in three *hours*. What the fuck — how many chances was he going to get to screw around after they figured out that he'd been tinkering?

* * *

Manufacturing the curative made him famished. His body was burning a lot of calories, and after a couple hours he felt like he could eat the ass out of a dead bear. Whatever was happening was happening, though! He felt the sores on his body dry up and start to slough off. He was hungry enough that he actually caught himself peeling off the scabby cornflakes and eating them. It grossed him out, but he was *hungry*.

His only visitor that night was a nurse, who made enough noise with her trolley on the way down the hall that he had time to balance the keyboard on top of the monitor and knuckle the bed back into position. The nurse was pleased to hear that he had an appetite and obligingly brought him a couple of supper-trays — the kitchen had sent up one for poor Joey, she explained.

Once Liam was satisfied that she was gone, he returned to his task with a renewed sense of urgency. No techs and no docs and no Colonel for six hours now — there must be a shitload of paperwork and fingerpointing over Joey, but who knew how long it would last?

He stuffed his face, nailing about three thousand calories over the next two hours, poking through the code. Here was a routine for stimulating the growth of large muscle-groups. Here was one for regenerating fine nerves. The enhanced reflexes sounded like a low-cal option, too, so he executed it. It was all betaware, but as between a liquidity event, a slow death on the palliative ward and a chance at a quick cure, what the fuck, he'd take his chances.

He was chuckling now, going through the code, learning the programmers' style and personality from their comments and variable names. He was so damned hungry, and the muscles in his back and limbs and ass and gut all felt like they were home to nests of termites.

He needed more food. He gingerly peeled off the surgical tape holding on the controller and its cable. Experimentally, he stood. His inner ear twirled rollercoaster for a minute or two, but then it settled down and he was actually erect — upright — well, both, he could cut glass with that boner, it was the first one he'd had in a year — and *walking*!

He stole out into the hallway, experiencing a frisson of delight and then the burning ritual humiliation of any person who finds himself in a public place wearing a hospital gown. His bony ass was hanging out of the back, the cool air of the dim ward raising goose-pimples on it.

He stepped into the next room. It was dusky-dark, the twilight of a hospital nighttime, and the two occupants were snoring in contratime. Each had his (her? it was too dark to tell) own nightstand, piled high with helium balloons, Care Bears, flowers and baskets of nuts, dried fruits

and chocolates. Saliva flooded Liam's mouth. He tiptoed across to each nightstand and held up the hem of his gown, then grinched the food into the pocket it made.

Stealthily, he stole his way down the length of the ward, emptying fruit-baskets, boxes of candy and chocolate, leftover dinner trays. By the time he returned to his room, he could hardly stand. He dumped the food out on the bed and began to shovel it into his face, going back through the code, looking for obvious bugs, memory leaks, buffer overruns. He found several and recompiled the apps, accelerating the pace of growth in his muscles. He could actually feel himself bulking up, feel the tone creeping back into his flesh.

He'd read the notes in the READMEs on waste heat and the potential to denature enzymes, so he stripped naked and soaked towels in a quiet trickle of ice-water in the small sink. He kept taking breaks from his work to wring out the steaming towels he wrapped around his body and wet them down again.

The next time he rose, his legs were springy. He parted the slats of the blinds and saw the sun rising over the distant ocean and knew it was time to hit the road, jack.

He tore loose the controller and its cable and shut down the computer. He undid the thumbscrews on the back of the case and slid it away, then tugged at the sled for the hard-disk until it sprang free. He ducked back out into the hall and quickly worked his way through the rooms until he found one with a change of men's clothes neatly folded on the chair — ill-fitting tan chinos and a blue Oxford shirt, the NoCal yuppie uniform. He found a pair of too-small penny-loafers too and jammed his feet into the toes. He dressed in his room and went through the wallet that was stuck in the pants pocket. A couple hundred bucks' worth of cash, some worthless plastic, a picture of a heavyset wife and three chubby kids. He dumped all the crap out, kept the cash, snatched up the drive-sled and booted, badging out with the tech's badge.

"How long have you been on the road, then?" Murray asked. His mouth tasted like an ashtray and he had a mild case of the shakes.

"Four months. I've been breaking into cars mostly. Stealing laptops and selling them for cash. I've got a box at the rooming-house with the hard-drive installed, and I've been using an e-gold account to buy little things online to help me out."

"Help you out with *what*?"

"Hacking — duh. First thing I did was reverse-engineer the interface bug. I wanted a safe virus I could grow arbitrary payloads for in my body. I embedded the antiviral hardening agent in the vector. It's a sexually transmissible *wellness*, dude. I've been barebacking my way through the skankiest crack-hoes in the Tenderloin, playing Patient Zero, infecting everyone with the Cure."

Murray sat up and his head swam. "You did what?"

"I cured AIDS. It's going around, it's catching, you might already be a winner."

“Jesus, Liam, what the fuck do you know about medicine? For all you know, your cure is worse than the disease — for all you know, we’re all going to have a — ‘*liquidity event*‘ any day now!”

“No chance of that happening, bro. I isolated the cause of that early on. This medical stuff is just *not that complicated* — once you get over the new jargon, it’s nothing you can’t learn as you go with a little judicious googling. Trust me. You’re soaking in it.”

It took Murray a moment to parse that. “You infected *me*?”

“The works — I’ve viralized all the best stuff. Metabolic controllers, until further notice, you’re on a five-cheeseburger-a-day diet; increased dendrite density; muscle-builders. At-will pain-dampeners. You’ll need those — I gave you the interface, too.”

A spasm shot up Murray’s back, then down again.

“It was on the cigarette butt. You’re cancer-immune, by the by. I’m extra contagious tonight.” Liam turned down his collar to show Murray the taped lump there, the dangling cable that disappeared down his shirt, connecting to the palmtop strapped to his belt.

Murray arched his back and mewled through locked jaws.

Liam caught his head before it slammed into the Toyota’s hood. “Breathe,” he hissed. “Relax. You’re only feeling the pain because you’re choosing not to ignore it. Try to ignore it, you’ll see. It kicks azz.”

* * *

“I needed an accomplice. A partner in crime. I’m underground, see? No credit-card, no ID. I can’t rent a car or hop a plane. I needed to recruit someone I could trust. Naturally, I thought of you.”

“I’m flattered,” Murray sarcased around a mouthful of double-bacon cheeseburger with extra mayo.

“You should be, asshole,” Liam said. They were at Murray’s one-bedroom techno-monastic condo: shit sofa, hyper-ergonomic chairs, dusty home theatre, computers everywhere. Liam drove them there, singing into the wind that whipped down from the sunroof, following the GPS’s sterile eurobabe voice as it guided them back to the anonymous shitbox building where Murray had located his carcass for eight years.

“Liam, you’re a pal, really, my best friend ever, I couldn’t be happier that you’re alive, but if I could get up I would fucking *kill you*. You *raped me*, asshole. Used my body without my permission.”

“You see it that way now, but give it a couple weeks, it’ll, ah, grow on you. Trust me. It’s rad. So, call in sick for the next week — you’re going to need some time to get used to the mods.”

“And if I don’t?”

“Do whatever you want, buddy, but I don’t think you’re going to be in any shape to go to work this week — maybe not next week either. Tell them it’s a personal crisis. Take some vacation days. Tell ‘em you’re going to a fat-farm. You must have a shitload of holidays saved up.”

“I do,” Murray said. “I don’t know why I should use them, though.”

“Oh, this is the best vacation of all, the Journey Thru Innerspace. You’re going to love it.”

* * *

Murray hadn’t counted on the coding.

Liam tunneled into his box at the rooming house and dumped its drive to one of the old laptops lying around Murray’s apartment. He set the laptop next to Murray while he drove to Fry’s Electronics to get the cabling and components he needed to make the emitter/receiver for the interface. They’d always had a running joke that you can build *anything* from parts at Fry’s, but when Liam invoked it, Murray barely cracked a smile. He was stepping through the code in a debugger, reading the comments Liam had left behind as he’d deciphered its form and function.

He was back in it. There was a runtime that simulated the platform and as he tweaked the code, he ran it on the simulator and checked out how his body would react if he executed it for real. Once he got a couple of liquidity events, he saw that Liam was right, they just weren’t that hard to avoid.

The API was great, there were function calls for just about everything. He delved into the cognitive stuff right off, since it was the area that was rawest, that Liam had devoted the least effort to. At-will serotonin production. Mnemonic perfection. Endorphin production, adrenalin. Zen master on a disk. Who needs meditation and biofeedback when you can do it all in code?

Out of habit, he was documenting as he went along, writing proper tutorials for the API, putting together a table of the different kinds of interaction he got with different mods. Good, clear docs, ready for printing, able to be slotted in as online help in the developer toolkit. Inspired by Joey, he began work on a routine that would replace all the maintenance chores that the platform did in sleep-mode, along with a subroutine that suppressed melatonin and all the other circadian chemicals that induced sleep.

Liam returned from Fry’s with bags full of cabling and soldering guns and breadboards. He draped a black pillowcase over a patch of living-room floor and laid everything out on it, wires and strippers and crimpers and components and a soldering gun, and went to work methodically, stripping and crimping and twisting. He’d taken out his own connector for reference and he was comparing them both, using a white LED torch on a headband to show him the pinouts on the custom end.

“So I’m thinking that I’ll clone the controller and stick it on my head first to make sure it works. You wear my wire and I’ll burn the new one in for a couple days and then we can swap. OK?”

“Sure,” Murray said, “whatever.” His fingers rattled on the keys.

“Got you one of these,” Liam said and held up a bulky Korean palmtop. “Runs Linux. You can cross-compile the SDK and all the libraries for it; the compiler’s on the drive. Good if you want to run an interactive app –” an application that changed its instructions based on output from the platform — “and it’s stinking cool, too. I fucking *love* gear.”

“Gear’s good,” Murray agreed. “Cheap as hell and faster every time I turn around.”

“Well, until Honorable Computing comes along,” Liam said. “That’ll put a nail in the old coffin.”

“You’re overreacting.”

“Naw. Just being realistic. Open up a shell, OK? See at the top, how it says ‘tty’? The kernel thinks it’s communicating with a printer. Your shell window is a simulation of a printer, so the kernel knows how to talk to it — it’s got plenty of compatibility layers between it and you. If the guy who wrote the code doesn’t want you to interface with it, you can’t. No emulation, that’s not ‘honorable.’ Your box is 0wned.”

Murray looked up from his keyboard. “So what do you want me to do about it, dead man?”

“Mostly dead,” Liam said. “Just think about it, OK? How much money you got in your savings account?”

“Nice segue. Not enough.”

“Not enough for what?”

“Not enough for sharing any of it with you.”

“Come on, dude, I’m going back underground. I need fifty grand to get out of the country — Canada, then buy a fake passport and head to London. Once I’m in the EU, I’m in good shape. I learned German last week, this week I’m doing French. The dendrite density shit is the shit.”

“Man und zooperman,” Murray said. “If you’re zo zooper, go and earn a buck or two, OK?”

“Come on, you know I’m good for it. Once this stuff is ready to go –”

“What stuff?”

“The codebase! Haven’t you figured it out yet? It’s a startup! We go into business in some former-Soviet Stan in Asia or some African kleptocracy. We infect the locals with the Cure, then the interface, and then we sell ‘em the software. It’s *viral marketing*, gettit?”

“Leaving aside CIA assassins, if only for the moment, there’s one gigantic flaw in your plan, dead-man.”

“I’m all aflutter with anticipation.”

“There’s no fucking revenue opportunity. The platform spreads for free — it’s already out there, you’ve seeded it with your magic undead super-cock. The hardware is commodity hardware, no margin and no money. The controller can be built out of spare parts from Fry’s — next gen, we’ll make it WiFi, so that we’re using commodity wireless chipsets and you can control the device from a distance –”

“– yeah, and that’s why we’re selling the software!” Liam hopped from foot to foot in a personal folk-dance celebrating his sublime cleverness.

“In Buttfuckistan or Kleptomalia. Where being a warez d00d is an honorable trade. We release our libraries and binaries and APIs and fifteen minutes later, they’re burning CDs in every *souk* and selling them for ten cents a throw.”

“Nope, that’s not gonna happen.”

“Why not?”

“We’re gonna deploy on Honorable hardware.”

“I am not hearing this.” Murray closed the lid of his laptop and tore into a slice of double-cheese meat-lover’s deep-dish pizza. “You are not telling me this.”

“You are. I am. It’s only temporary. The interface isn’t Honorable, so anyone who reverse-engineers it can make his own apps. We’re just getting ours while the getting is good. All the good stuff — say, pain-control and universal antiviral hardening — we’ll make for free, viralize it. Once our stuff is in the market, the whole world’s going to change, anyway. There’ll be apps for happiness, cures for every disease, hibernation, limb-regeneration, whatever. Anything any human body has ever done, ever, you’ll be able to do at-will. You think there’s going to be anything recognizable as an economy once we’re ubiquitous?”

Every morning, upon rising, Murray looked down at his toes and thought, “Hello toes.” It had been ten years since he’d had regular acquaintance with anything south of his gut. But his gut was gone, tight as a drumhead. He was free from scars and age-marks and unsightly moles and his beard wouldn’t grow in again until he asked it to. When he thought about it, he could feel the dull ache of the new teeth coming in underneath the ones that had grown discolored and chipped, the back molar with all the ugly amalgam fillings, but if he chose to ignore it, the pain simply went away.

He flexed the muscles, great and small, all around his body. His fat index was low enough to see the definition of each of those superbly toned slabs of flexible contained energy — he looked like an anatomy lesson, and it was all he could do not to stare at himself in the mirror all day.

But he couldn't do that — not today, anyway. He was needed back at the office. He was already in the shitter at work over his "unexpected trip to a heath-farm," and if he left it any longer, he'd be out on his toned ass. He hadn't even been able to go out for new clothes — Liam had every liquid cent he could lay hands on, as well as his credit-cards.

He found a pair of ancient, threadbare jeans and a couple of medium t-shirts that clung to the pecs that had grown up underneath his formerly sagging man-boobs and left for the office.

He drew stares on the way to his desk. The documentation department hummed with hormonal female energy, and half a dozen of his co-workers found cause to cruise past his desk before he took his morning break. As he greedily scarfed up a box of warm Krispy Kremes, his cellphone rang.

"Yeah?" he said. The caller-ID was the number of the international GSM phone he'd bought for Liam.

"They're after us," Liam said. "I was at the Surrey border-crossing and the Canadian immigration guy had my pic!"

Murray's heart pounded. He concentrated for a moment, then his heart calmed, a jolt of serotonin lifting his spirits. "Did you get away?"

"Of course I got away. Jesus, you think that the CIA gives you a phone call? I took off cross-country, went over the fence for the duty-free and headed for the brush. They shot me in the fucking leg — I had to dig the bullet out with my multitool. I'm sending in ass-loads of T-cells and knitting it as fast as I can."

Panic crept up Murray's esophagus, and he tamped it down. It broke out in his knees, he tamped it down. His balance swam, he stabilized it. He focused his eyes with an effort. "They *shot* you?"

"I think they were trying to wing me. Look, I burned all the source in 4,096-bit GPG ciphertext onto a couple of CDs, then zeroed out my drive. You've got to do the same, it's only a matter of time until they run my back-trail to you. The code is our only bargaining chip."

"I'm at work — the backups are at home, I just can't."

"Leave, asshole, like *now*! Go — get in your car and *drive*. Go home and start scrubbing the drives. I left a bottle of industrial paint-stripper behind and a bulk eraser. Unscrew every drive-casing, smash the platters and dump them in a tub with all the stripper, then put the tub onto the bulk-eraser — that should do it. Keep one copy, ciphertext only, and make the key a good one. Are you going?"

“I’m badging out of the lot, shit, shit, shit. What the fuck did you do to me?”

“Don’t, OK? Just don’t. I’ve got my own problems. I’ve got to go now. I’ll call you later once I get somewhere.”

* * *

He thought hard on the way back to his condo, as he whipped down the off-peak emptiness of Highway 101. Being a coder was all about doing things in the correct order: first a; then b; then, if c equals d, e; otherwise, f.

First, get home. Then set the stateful operation of his body for maximal efficiency: reset his metabolism, increase the pace of dendrite densification. Manufacture viralized anti-viral in all his serum. Lots of serotonin and at-will endorphin. Hard times ahead.

Next, encipher and back up the data to a removable. Did he have any CD blanks at home? With eidetic clarity, he saw the half-spent spool of generic blanks on the second shelf of the media totem.

Then trash the disks, pack a bag and hit the road. Where to?

He pulled into his driveway, hammered the elevator button a dozen times, then bolted for the stairs. Five flights later, he slammed his key into the lock and went into motion, executing the plan. The password gave him pause — generating a 4,096 bit key that he could remember was going to be damned hard, but then he closed his eyes and recalled, with perfect clarity, the first five pages of documentation he’d written for the API. His fingers rattled on the keys at speed, zero typos.

He was just dumping the last of the platters into the acid bath when they broke his door down. Half a dozen big guys in martian riot-gear, outsized science-fiction black-ops guns. One flipped up his visor and pointed to a badge clipped to a D-ring on his tactical vest.

“Police,” he barked. “Hands where I can see them.”

The serotonin flooded the murky grey recesses of Murray’s brain and he was able to smile nonchalantly as he straightened from his work, hands held loosely away from his sides. The cop pulled a zap-strap from a holster at his belt and bound his wrists tight. He snapped on a pair of latex gloves and untaped the interface on the back of Murray’s neck, then slapped a bandage over it.

“Am I under arrest?”

“You’re not cleared to know that,” the cop said.

“Special Agent Fredericks, right?” Murray said. “Liam told me about you.”

“Dig yourself in deeper, that’s right. No one wants to hear from you. Not yet, anyway.” He took a bag off his belt, then, in a quick motion, slid it over Murray’s head, cinching it tight at the throat, but not so tight he couldn’t breathe. The fabric passed air, but not light, and Murray was plunged into total darkness. “There’s a gag that goes with the hood. If you play nice, we won’t have to use it.”

“I’m nice, I’m nice,” Murray said.

“Bag it all and get it back to the house. You and you, take him down the back way.”

Murray felt the bodies moving near him, then thick zap-straps cinching his arms, knees, thighs and ankles. He tottered and tipped backwards, twisting his head to avoid smacking it, but before he hit the ground, he’d be roughly scooped up into a fireman’s carry, resting on bulky body-armor.

As they carried him out, he heard his cellphone ring. Someone plucked it off his belt and answered it. Special Agent Fredericks said, “Hello, Liam.”

* * *

Machineguns-and-biometrics bunkers have their own special signature scent, scrubbed air and coffee farts and ozone. They cut his clothes off and disinfected him, then took him through two air-showers to remove particulate that the jets of icy pungent Lysol hadn’t taken care of. He was dumped on a soft pallet, still in the dark.

“You know why you’re here,” Special Agent Fredericks said from somewhere behind him.

“Why don’t you refresh me?” He was calm and cool, heart normal. The cramped muscles bound by the plastic straps eased loose, relaxing under him.

“We found two CDs of encrypted data on your premises. We can crack them, given time, but it will reflect well on you if you assist us in our inquiries.”

“Given about a billion years. No one can brute-force a 4,096-bit GPG cipher. It’s what you use in your own communications. I’ve worked on military projects, you know that. If you could factor out the products of large primes, you wouldn’t depend on them for your own security. I’m not getting out of here ever, no matter how much I cooperate.”

“You’ve got an awfully low opinion of your country, sir.” Murray thought he detected a note of real anger in the Fed’s voice and tried not to take satisfaction in it.

“Why? Because I don’t believe you’ve got magic technology hidden away up your asses?”

“No, sir, because you think you won’t get just treatment at our hands.”

“Am I under arrest?”

“You’re not cleared for that information.”

“We’re at an impasse, Special Agent Fredericks. You don’t trust me and I don’t have any reason to trust you.”

“You have every reason to trust me,” the voice said, very close in now.

“Why?”

The hood over his tag was tugged to one side and he heard a sawing sound as a knife hacked through the fabric at the base of his skull. Gloved fingers worked a plug into the socket there. “Because,” the voice hissed in his ear, “because I am *not* stimulating the pain center of your brain. Because I am not cutting off the blood-supply to your extremities. Because I am not draining your brain of all the serotonin there or leaving you in a vegetative state. Because I can do all of these things and I’m not.”

Murray tamped his adrenals, counteracted their effect, relaxed back into his bonds. “You think you could outrace me? I could stop my heart right now, long before you could do any of those things.” Thinking: I am a total bad-azz, I am. But I don’t want to die.

“Tell him,” Liam said.

“Liam?” Murray tried to twist his head toward the voice, but strong hands held it in place.

“Tell him,” Liam said again. “We’ll get a deal. They don’t want us dead, they just want us under control. Tell him, OK?”

Murray’s adrenals were firing at max now, he was sweating uncontrollably. His limbs twitched hard against his bonds, the plastic straps cutting into them, the pain surfacing despite his efforts. It hit him. His wonderful body was 0wnz0red by the Feds.

“Tell me, and you have my word that no harm will come to you. You’ll get all the resources you want. You can code as much as you want.”

Murray began to recite his key, all five pages of it, through the muffling hood.

Liam was fully clothed, no visual restraints. As Murray chafed feeling back into his hands and feet, Liam crossed the locked office with its grey industrial carpeting and tossed him a set of khakis and a pair of boxers. Murray dressed silently, then turned his accusing glare on Liam.

“How far did you get?”

“I didn’t even make it out of the state. They caught me in Sebastopol, took me off the Greyhound in cuffs with six guns on me all the time.”

“The disks?”

“They needed to be sure that you got rid of all the backups, that there wasn’t anything stashed online or in a safe-deposit box, that they had the only copy. It was their idea.”

“Did you really get shot?”

“I really got shot.”

“I hope it really fucking hurt.”

“It really fucking hurt.”

“Well, good.”

The door opened and Special Agent Fredericks appeared with a big brown bag of Frappuccinos and muffins. He passed them around.

“My people tell me that you write excellent documentation, Mr. Swain.”

“What can I say? It’s a gift.”

“And they tell me that you two have written some remarkable code.”

“Another gift.”

“We always need good coders here.”

“What’s the job pay? How are the bennies? How much vacation?”

“As much as you want, excellent, as long as you want, provided we approve the destinations first. Once you’re cleared.”

“It’s not enough,” Murray said, upending twenty ounces of West Coast frou-frou caffeine delivery system on the carpeting.

“Come on, Murray,” Liam said. “Don’t be that way.”

Special Agent Fredericks fished in the bag and produced another novelty coffee beverage and handed it to Murray. “Make this one last, it’s all that’s left.”

“With all due respect,” Murray said, feeling a swell of righteousness in his chest, in his thighs, in his groin, “go fuck yourself. You don’t 0wn me.”

“They do, Murray. They 0wn both our asses.” Liam said, staring into the puddle of coffee slurry on the carpet.

Murray crossed the room as fast as he could and smacked Liam, open palm, across the cheek.

“That will do,” Special Agent Fredericks said, with surprising mildness.

“He needed smacking,” Murray said, without rancor, and sat back down.

“Liam, why don’t you wait for us in the hallway?”

* * *

“You came around,” Liam said. “Everyone does. These guys 0wn.”

“I didn’t ask to share a room with you, Liam. I’m not glad I am. I’d rather not be reminded of that fact, so shut your fucking mouth before I shut it for you.”

“What do you want, an apology? I’m sorry. I’m sorry I infected you, I’m sorry I helped them catch you. I’m sorry I fuxored your life. What can I say?”

“You can shut up anytime now.”

“Well, this is going to be a *swell* living-arrangement.”

The room was labeled “Officers’ Quarters,” and it had two good, firm queen-sized mattresses, premium cable, two identical stainless-steel dressers, and two good ergonomic chairs. There were junction boxes beside each desk with locked covers that Murray supposed housed Ethernet ports. All the comforts of home.

Murray lay on his bed and pulled the blankets over his head. Though he didn’t need to sleep, he chose to.

* * *

For two weeks, Murray sat at his assigned desk, in his assigned cube, and zoned out on the screen-saver. He refused to touch the keyboard, refused to touch the mouse. Liam had the adjacent desk for a week, then they moved him to another office, so that Murray had solitude in which to contemplate the whirling star-field. He’d have a cup of coffee at 10:30 and started to feel a little sniffly in the back of his nose. He ate in the commissary at his own table. If anyone sat down at his table, he stood up and left. They didn’t sit at his table. At 2PM, they’d send in a box of warm Krispy Kremes, and by 3PM, his blood-sugar would be crashing and he’d be sobbing over his keyboard. He refused to adjust his serotonin levels.

On the third Monday, he turned up at his desk at 9AM as usual and found a clipboard on his chair with a ball-point tied to it.

Discharge papers. Non-disclosure agreements. Cross-your-heart swears on pain of death. A modest pension. Post-It “sign here” tabs had been stuck on here, here and here.

* * *

The junkie couldn't have been more than fifteen years old. She was death-camp skinny, tracked out, sitting cross-legged on a cardboard box on the sidewalk, sunning herself in the thin Mission noonlight. "Wanna buy a laptop? Two hundred bucks."

Murray stopped. "Where'd you get it?"

"I stole it," she said. "Out of a convertible. It looks real nice. One-fifty."

"Two hundred," Murray said. "But you've got to do me a favor."

"Three hundred, and you wear a condom."

"Not that kind of favor. You know the Radio Shack on Mission at 24th? Give them this parts list and come back here. Here's a $100 down-payment."

He kept his eyes peeled for the minders he'd occasionally spotted shadowing him when he went out for groceries, but they were nowhere to be seen. Maybe he'd lost them in the traffic on the 101. By the time the girl got back with the parts he'd need to make his interface, he was sweating bullets, but once he had the laptop open and began to rekey the entire codebase, the eidetic rush of perfect memory dispelled all his nervousness, leaving him cool and calm as the sun set over the Mission.

* * *

From the sky, Africa was green and lush, but once the plane touched down in Mogadishu, all Murray saw was sere brown plains and blowing dust. He sprang up from his seat, laundering the sleep toxins in his brain and the fatigue toxins in his legs and ass as he did.

He was the first off the jetway and the first at the Customs desk.

"Do you have any commercial or work-related goods, sir?"

"No sir," Murray said, willing himself calm.

"But you have a laptop computer," the Customs man said, eyeballing his case.

"Oh, yeah. That. Can't ever get away from work, you know how it is."

"I certainly hope you find time to relax, sir." The Customs man stamped the passport he'd bought in New York.

"When you love your work, it can be relaxing."

"Enjoy your stay in Somalia, sir."

The End

Cory Doctorow (craphound.com) is a science fiction author, activist, journalist and blogger — the co-editor of Boing Boing (boingboing.net) and the author of Tor Teens/HarperCollins UK novels like FOR THE WIN and the bestselling LITTLE BROTHER. He is the former European director of the Electronic Frontier Foundation and co-founded the UK Open Rights Group. Born in Toronto, Canada, he now lives in London.

Breaking Heinlein's Third Rule: Exercises for Revision
by Sarah Einstein

In his 1947 essay, "On the Writing of Speculative Fiction," Robert Heinlein famously delivered his Rules for Writing:

1. You must write.
2. You must finish what you write.
3. You must refrain from rewriting, except to editorial order.
4. You must put the work on the market.
5. You must keep the work on the market until it is sold.

And, in fact, four of these fives rules apply to all writers at all times. But the third… well, the third only applies if you're Robert Heinlein, and even then I suspect he's talking about not tinkering with finished manuscripts and *not* about publishing first drafts. In fact, I have *never* seen another author suggest that revision isn't a critical part of the process.

Neil Gaiman's rules for writing, published as part of the multi-authored article "Ten Rules for Writing Fiction" on *The Guardian's* website on February 20th, 2010, begin much the same way Heinlein's do:

1. Write.
2. Put one word after another. Find the right word, put it down.
3. Finish what you're writing. Whatever you have to do to finish it, finish it.

But his next three rules are all about revision:

4. Put it aside. Read it pretending you've never read it before. Show it to friends whose opinions you respect and who like the kind of thing that this is.
5. Remember: when people tell you something's wrong or doesn't work for them, they are almost always right. When they tell you exactly what they think is wrong and how to fix it, they are almost always wrong.
6. Fix it. Remember that, sooner or later, before it ever reaches perfection, you will have to let it go and move on and start to write the next thing. Perfection is like chasing the horizon. Keep moving.

As the judge of last year's contest, I will say that we saw in the early crop of entries—those that arrived in the first month or so that we were accepting submissions—many very promising stories that, had the author taken a little more time in revision, might have been strong contenders for the prize. And so, to help this year's entrants, I would like to share a few of my favorite revision strategies.

Read Everything Aloud to Yourself: The first thing I do after writing a chunk of an essay or story is to sit down and read the entire piece out loud. This has two benefits. First, it slows you down, and this allows you to notice little grammatical errors, the unintended repetition of words, verb tense changes, and the like. Because you know what you *meant* to put on the page, it's very

easy to read what you intended to write rather than what you actually wrote. For instance, in the introduction to this piece, I had originally written "if your Robert Heinlein" instead of "if you're Robert Heinlein." That's exactly the sort of mistake I tend only to miss when I'm rereading silently (and so quickly), but catch when I slow down to read aloud. The second benefit is that, in listening to your piece as you read it, you'll hear it a new way. It's very difficult to move from being the writer of a piece to being one of its readers. Listening to your work, rather than reading it, is a small step toward having that necessary distance.

Develop A Small Circle of Trusted Readers: Feedback from readers is critical to finding the problems in your work that you can't see because you're too close to it. (See Gaiman's fourth and fifth rules.) But picking the right readers is critical and can be difficult. Here are my suggestions:

- Keep the number of people with whom you share work-in-progress to a manageable number. I have three trusted readers, and that works well for me. It's enough for me to see which issues are common to all the readers, but not so many that I'm sifting through pages of conflicting feedback.
- Pick writers whose work you admire and whose work is not completely dissimilar to your own. All three of my trusted readers are more accomplished writers than I am and all three of them write often—if not primarily—in my genre. All three have different strengths, and these are reflected in their own works.
- Always repay the favor somehow. The trusted reader relationship isn't always reciprocal; some of the people who read for me don't show me their early drafts. They have their own readers, and often those readers don't show them their own early work either. So find other ways to show your gratitude. Me, I grow tomatoes, bake pies, and offer to buy lunch when they are ready to share their comments. Remember, this is *work* for your readers. Always say thank you.
- Say yes when someone asks you to be one of her trusted readers, but only if you enjoy reading her work.
- Many of us, particularly as new writers, don't really know a lot of other writers we can ask to be part of our circles. There are a number of very good online workshops, and these can be great places to find those people, but these sites have their own dangers. Because you don't have control over who reviews your work, you'll get a certain number of "garbage reviews" and these can harm, rather than help, your writing. Learn to recognize both unearned praise and overly harsh or unhelpful criticism. Be mindful that many reviewers may not yet themselves be particularly polished writers. And always, always, always ignore the reviewers who apply a set of arbitrary rules—never use adverbs, don't use the word "suddenly," always start in the middle of the action—to every work they review. And, if you are workshopping a book-length piece, keep in mind that your reviewers are reading your work episodically. When you have a strong draft of the entire work, ask a few of the people who've been most helpful to you if you can email them the full work to critique. Things will show up for them when they read the piece as a whole that chapter-by-chapter reviewers will miss.

Do At Least One Round of Edits from a Printed Copy: When you are happy with the work on the screen, print it out and look at it again on the page. Like reading aloud, this slows you

down—you have to write your comments in the margins instead of being able to make changes instantly—and, for me at least, that again makes certain kinds of mistakes easier to spot. Consider cutting up the manuscript and moving pieces of it around. Does this character description fit better on page three than it does on page seven? How does the story read if I cut out the paragraph about the main character's childhood dog all together? Having something physical to work with opens up all sorts of possibilities.

Don't Start Revising After the First Form Rejection: Getting a rejection letter from an editor doesn't mean that your story isn't any good. Form rejections that offer no suggestions only mean that particular editor didn't feel the piece was right for that particular publication at that particular time. I guarantee you that we're going to reject several very publishable stories this year because we only have room for one piece. Personally, I don't consider revision until I get ten form rejections. (I usually submit to five journals at a time, which often means that a piece is at least a year old before I consider revising it based on rejections.) Reactive editing, particularly when you're reacting to rejection without feedback, is like chasing your own tail.

If you're lucky enough to get a personal rejection from an editor, take the recommendations made seriously but—unless the editor offers to reconsider the piece if you make the suggested edits—don't assume you have to make all the recommended revisions. The exception to this is when the suggestions deal with basic craft issues. If an editor says she liked your piece, but couldn't get beyond all the misspellings and grammatical errors, then by all means root those out. But if she says she found the ending a little too abrupt, or the main character unsympathetic, it's perfectly alright to decide that you *want* an abrupt ending or a difficult protagonist. Never forget that this is *your* work.

Don't Forget Gaiman's Sixth Rule: "Remember that, sooner or later, before it ever reaches perfection, you will have to let it go and move on and start to write the next thing. Perfection is like chasing the horizon. Keep moving." Let the piece sit for a while between drafts, revise until you're happy with the work, and then start sending it out for publication. If you wait until you feel the work is perfect, you'll be writing the same story forever.

I hope these suggestions are helpful to you, and I am really looking forward to reading your entries in this year's contest. If you have other revision strategies that work for you, please share them with us by posting them in the comments section following this essay. What works for me may not be what works for you, and the more we share ideas the better all of our writing becomes.

The End

Sarah Einstein is a Puschart Prize winning author whose work has appeared in PANK, Fringe, Ninth Letter, Whitefish Review, and other literary journals. She is pursuing a Ph.D. in Creative Writing at Ohio University.

Cowboys and Aliens and Time-Travel, Oh My! Tall-Tech Tales from the Weird Wild West
by Henry Cribbs

I have been psyched to see *Cowboys & Aliens* since I saw the first trailer nearly a year ago. For those who haven't heard of it because they've been hiding somewhere under (or more likely off) this rock for the past several months, *Cowboys & Aliens*, perhaps the summer's most anticipated film (by me, in any case), is a science fiction Western starring Daniel Craig and Harrison Ford, directed by John Favreau. The movie is based (however closely or loosely has yet to be determined) on the 2006 comic ('scuse me, "graphic novel") of the same title, created by Scott Mitchell Rosenberg.

Science fiction *and* a Western. (You had me at 'scifi'.) But how, exactly, does one combine the two genres?

There's the 'space-Western', of course, in which traditional Western motifs are played out in space or on other planets. (Space being "the final frontier" makes this transposition rather easy.) One recent cinematic example is Joss Whedon's *Firefly*. Yes, I know it was an entire television series, not a movie, but Whedon shot it all in widescreen, and deliberately chose camera angles that networks couldn't easily convert to pan-n'-scan so that it would *stay* in widescreen even on the small screen, so it deserves to be classed as 'cinema' (but if you're being picky you can at least count its movie sequel, *Serenity*). An older (and mercifully forgotten until now) example of the space-Western is *Battle Beyond the Stars* (1980), a low-budget space-opera version of the classic *The Magnificent Seven* (1960), itself a Western remake of Japanese director Akira Kurosawa's *The Seven Samurai* (1954). But I recommend Pixar's *A Bug's Life* (1998) over *Battle* if you're looking for a better scifi version. (*Bug's Life* really does count as scifi – Flik the ant's stickpunk inventions are just bug-tech steampunk.)

And of course there's the seminal space-Western, the television show *Star Trek*. (Do I really *have* to say "The Original Series" when I mention it?) In Gene Roddenberry's original pitch of the show to Herb Solow he calls it "a *Wagon Train* concept" – only in space. *Star Trek* also often made use of actors who had experience in Western films: Jeffrey Hunter from *The Searchers* (1956) played Kirk's predecessor Christopher Pike, and DeForest Kelley (Dr. Leonard "Bones" McCoy) appeared in *Gunfight at the O.K. Corral* (1957). And in a completely unsubtle Western allusion, in the episode "Spectre of the Gun", Kirk's crew must relive the events of that O.K. Corral shootout in an alien-manufactured surreal replica of Tombstone (except Kelley plays a Clanton instead of an Earp in this one).

But *Cowboys & Aliens* takes place on Earth, not in space or on some other planet. This type of crossover isn't technically a 'space-Western'; it's more properly labeled 'scifi-Western'. A scifi Western takes place in the historical American West (or occasionally in an alternate-history West), but with scifi elements such as aliens or futuristic technology. (Note that *C&A* has both.) While space-Westerns bring elements of the Old West into traditional scifi settings, scifi-Westerns instead take elements of scifi and put them into traditional Old West settings.

Perhaps the earliest scifi-Western film is the early serial *The Phantom Empire* (1935), complete with robots, an underground civilization, and singing cowboy Gene Autry in one of his earliest

movie appearances. *Wild Wild West* (both the 60's television series and the 1999 film) and the 90's series *The Adventures of Brisco County, Jr* both fit in this category as well, since in both the protagonists fight with (or sometimes against) futuristic gadgetry. These last two examples seem to imply that steampunk *might* qualify as scifi-Western. While there certainly is some crossover between the sub-genres, if it doesn't take place in the Old West, it's just plain old (extra)ordinary steampunk.

I admit I had a hard time this month waiting for *Cowboys & Aliens*. I decided I would have to get my scifi-Western fix by reading some if I couldn't watch any. But first I had to *find* some to read. Unfortunately, stories in this very specific subgenre aren't too common.

Edgar Rice Burroughs's Martian tales *might* count as scifi-Western. After all, John Carter was a retired Confederate soldier mining gold in the Arizona mountains, so he was at least in the right time period and in the right part of the country at the start of his story. But most of his adventures take place on Mars, and there's already a label – 'sword-and-planet' – for his type of story, anyway. Besides, I'd already read through them all recently (see RSF#1).

I did find an excellent piece by Tony Daniel, "A Dry Quiet War" (in *Asimov's Science Fiction*, June 1996), which deserves mention even though it is technically a space-Western (by my own definition), since it is set on the planet Ferro instead of Earth. It could easily be set in Earth's Old West, though (thanks to temporal displacement), so I want to call it a scifi-Western anyway. The protagonist, Colonel Henry Bone, is a time-traveling biotech-enhanced space marine who has retired back to his ranch in his home time, but a few buffed-up vets from *way* out of town show up and decide they *don't* want to settle down so much, shooting up the town and beating up Bone's girlfriend. The problem is that if Bone interferes it can alter the outcome of the Big War at the End of Time which he just got finished fighting. The author himself has said a direct inspiration for the story is John Ford's films, so you can maybe guess what Bone decides to do. For those readers who didn't hang on to their scfi magazines from fifteen years ago, the story has been anthologized by Gardner Dozois in his 2005 *Best of the Best* (reviewed in RSF#8).

Another classic scifi-Western is "Night of the Cooters" by Howard Waldrop (in *Omni*, April 1987). It retells the story of the Martian invasion in H.G. Wells's *War of the Worlds* (see RSF#11), but this time from the point of view of Sheriff Bertram Lindley of Pachuco City, Texas. It appears that more than just London was targeted by the Martians, and the sheriff and his deputies have to figure out how to deal with the mysterious cylinder, heat rays, and tripod war machines. Let's just put it this way: It's *Texas*, so they aren't going to lie down and let the invaders walk all over them while waiting for the Martians' immune systems to fail like them folks in England did. This action-packed, tongue-in-cheek tale, which Waldrop dedicates to Slim Pickens, is a great homage to Wells (and to Texans). It can be found in Waldrop's eponymous anthology *Night of the Cooters* (1990), and also in Kevin J. Anderson's *War of the Worlds: Global Dispatches* (1996), a collection of similar retellings of the Martian invasion by various authors (in the guise of various other authors).

After these two, other scifi-Western tales seemed harder to come by, until I discovered an annual publication devoted to the subgenre, *Science Fiction Trails*, edited and published by David B. Riley. Now in its sixth issue, the annual is a continuation of *Trails, Intriguing Stories of the Old*

West, and counting that publication its history goes back a full twenty years. The most recent two issues, #5 and #6 (both copyright 2010), are currently still available, so I picked them up. They're perfect-bound magazine-sized paperbacks with full-color covers, ranging from 72 pages to 93 pages (#5 and 6, respectively). The cover art by Laura Givens (#5) and Russell Morgan (#6) is exceptional, with both detailed portraits featuring a traditional "Grey" alien on horseback. The tag line of *SFT* is "Where Science Fiction Meets the Wild West," and for the most part this is true, including steampunk, alternate histories, alien encounters, and time-travel – though one supernatural undead horror story also creeps in amongst the scifi in both issues. There are some definite gems to be had in these two issues, though it's true that some are still a bit in need of cutting and polishing (and one or two lumps of coal need some time and pressure before they become diamonds).

My particular favorite in these two issues is "Brass and Steel" (#6), a steampunk tale by James R. Strickland, author of the post-cyberpunk novel *Looking Glass* (see interview in RSF#6). "Brass and Steel" is narrated by Dante Blackmore, the marshall of the mining town of Perdition. Blackmore fought for the War Department against the 'Hive,' a sort of *Terminator*-style steampunk-machine revolution which produced 'Dopes' (short for Doppelgängers), which are human-looking on the outside, but "full of brass and steel" on the inside. Blackmore suspects that the Hive may not be as dead as most people think, and a young half-Chinese prostitute may be able to confirm his suspicions. From some of Strickland's recent blog posts, it appears he is in the process of expanding this story into a novel, *Brass and Steel: Inferno*, and I'm looking forward to seeing it.

C.J. Killmer has created a recurring character also worth watching: Lefty Bolingbroke, a one-armed, middle-aged, former Confederate soldier turned gun-for-hire who appears in both issues. In "A Sackful of Morgans" (#5), a steampunk inventor offers Lefty a prosthetic arm good enough to quick-draw his Colt in a gunfight. In "Diablo Dodd's Dirigible" (#6), the gunslinger confronts an old wartime nemesis who is using an airship to massacre Apache villages. Lefty has an inherent charm and grit which has one rooting for him even when he behaves like a cardboard hero, and I'm looking out for his next adventure.

One story in particular intrigued me mainly because of who wrote it. Issue #5 includes a reprint of Jack London's "A Thousand Deaths." (Yes, the *Call of the Wild* Jack London.) It's not technically a scifi-Western according my definition, since while it is set in the right time period it's not set precisely in the Old West, but even further west in the Pacific Ocean. Still, I'm glad Riley included it. Originally published in the May 1899 Boston-based fiction monthly, *The Black Cat*, it earned London, according to his own notebook, the "first money I ever received for a story." It recounts the experiences of a man whose father holds him prisoner and kills him over and over again in order to perfect a new scientific technique for resurrecting the dead. (It also includes a disintegration ray.) Who knew London wrote scifi? Even if it's not one of London's best works, Riley is certainly correct in his editor's note that "London's worst is better than most writers' best," so it's worth a read.

Lou Antonelli, whose stories are collected in *Fantastic Texas* and *Texas and Other Planets*, also has a reprint in issue #5. In "A Djinn for General Houston" (originally appearing in *Surprising Stories*), the narrator spins a delectable yarn about antediluvian technology, offering to tell the

‘true’ story of the ‘Yellow Rose’ of Texas and the defeat of Santa Anna (and gives a reasonable scifi explanation for Aladdin’s lamp along the way). Other notable stories include David M. Fitzpatrick’s “The Gunslinger’s Code” (#5), which proves there is no honor among thieves, and David Lee Summers’s “Pirates of Baja,” which puts a steampunk version of the Confederate submarine *Hunley* off the coast of California.

Unfortunately, rather than giving me my scifi-Western fix this month, all these tall-tech tales only whetted my appetite for more. I’m not sure I can wait another 29 days for *Cowboys and Aliens* to open.

Maybe I should find something else to read….

Henry Cribbs somehow managed to sneak his science-fiction poem about Schrödinger’s cat into the literary art journal Lake Effect, and has also published book reviews for Philosophical Psychology, Chicago Literary Review, and Black Warrior Review. He taught philosophy and creative writing at the University of South Carolina for several years, and now forces his high school English students to read Ray Bradbury. He currently serves on the editorial board for Nimrod International Journal of Prose and Poetry.