

# ALIENS AND AI'S

## A SHORT STORY COLLECTION

# Lawrence M Schoen

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"Smooth Manuever" first appeared in Blue Food (#4, 2001)

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"Euphemism Skin" first appeared in Spaceways Weekly (#100, 1999)

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There is something ethereal about an electronic book, something that in turn brings to mind other invisibles and intangibles. In preparing the final manuscript I found myself surrounded by the unseen, remembering familiar conversations, and conversing with family members who linger in memory. Beyond the physical, there is the spiritual. Beyond the palpable there is the digital. On the off chance that any of my ethereal relations want something to read, this book is for them.

*Lawrence M. Schoen*

Philadelphia, PA

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## As Harmless As a Human Being

*Mark W. Tiedemann*

You only get this in science fiction. It may seem you get it in mystery fiction, but it's different. There you have villains, evildoers, murderers, thieves-conscious beings like yourself creating a malevolent situation the protagonist must figure out and thwart, and most of the time the only mystery is finding out who the bad guy is. You don't have to understand anything fundamental about the universe to solve the mystery. In science fiction, though, you don't even need a bad guy. All you need is a situation wherein the universe is manifesting itself at its most bizarre.

Calling it Idea Fiction or Problem-Solving Fiction leeches the potency, muffles the sting. Let me give you a real-life example of what I'm talking about.

In the distant past, when I was a freshman in high school, in a science class, the teacher was prepping us for an experiment involving dry ice. One student went out to get some from a nearby ice cream parlor and brought it back in a cooler, wrapped in brown paper. The teacher handled it after that, wearing big mittens, well-insulated. It lay on a counter, waiting for other preparations-which only took a couple of minutes-a big block of eerily smoking whitish stuff.

The teacher announced she was ready for it-for a piece of it-and one of my classmates, jumping the gun and trying to be helpful, reached for it. Barehanded.

Memory has made me edit this for maximum drama, so perhaps it didn't happen as smoothly as this, but basically I grabbed her arm and pulled her back. She glared at me. Before she could start chewing me out, I snatched an old screwdriver lying nearby and jammed it into the block. The metal squealed as the frozen CO<sub>2</sub> dropped its internal temperature precipitously. After a few seconds, I pulled the screwdriver out and tapped it on the edge of the counter-it snapped into several pieces.

My classmate's eyes, as they say, grew large as saucers.

It was a major "Ooooooh!" moment, and a crowd gathered around.

(In retrospect, the screwdriver was rusty-it might not have worked so neatly with a new one, and I'd have looked like an idiot, and she might have gone ahead and grabbed that chunk of sub-zero hardness, possibly losing a finger or two in the process, and instead of a neat "nature-of-the-universe" demonstration, we'd have had an emergency room trip. But it did work that way and no one's fingers were sacrificed.)

Pretty mundane, you might say. Dry ice, big deal-everybody knows about dry ice, everybody has heard stories of people doing stupid things with it. Well, yeah, but at fourteen? It's easy to forget how new and shiny things are at that age, and it's always shocking to remember that there are people well past adolescence who still pick up the block of dry ice with bare hands, so, no, not everyone knows what we think they should. It doesn't matter. When I shattered that screwdriver, I prompted that reaction from those who didn't know that could happen.

And that reaction-in response to that kind of new notion, insight, idea-that's what science fiction can do that other genres really don't.

Science fiction writers love evoking that reaction, and SF readers love reacting to them. I call it the Ooh Factor. Sometimes it's a good, solid "Ooh!"; other times, a measured "Oh, cool." Hence, SF, making full use of the Ooh Factor inherent in the nature of reality, has given us stories that come in many

varieties, but basically come down to expectational challenges solved by the application of intelligence. Applied intelligence, of course-you can have an I.Q. off the Mensa scales but if you don't use it, which is an act of will, you are still prey to the shell games of life.

These stories come in two basic types. There is the grandiose, wherein a problem of cosmic significance must be solved, and there is the more intimate, personal event story, wherein the problem concerns private matters, small issues, immediate problems of getting through the day in one piece. Of the two, the latter is, I think, more difficult and, when done well, more rewarding. Because usually, beneath the tinier stage of the personal, we can see those workings of the Universe that so bedevil us, and the suggestion of how the cosmic might actually work. Arguing, as it were, from the small to the large.

I'm thinking of stories like Katherine MacLean's "The Snowball Effect" or Pamela Zoline's "The Heat Death of the Universe" or Robert Heinlein's "He Built A Crooked House." Stories about the most ordinary of things-knitting, doing the housework, architecture-that end up giving us an insight into nature, systems, showing us patterns we may have suspected existed but could never quite define, stories that at the end leave a sense of "Oh, so that's how that works..."

I'm also thinking of the bite derived from stories like Damon Knight's "Not With A Bang" and "To Serve Man"; Danny Platcha's "The Man From When"; James Tiptree Jr.'s "And I Awoke And Found Me Here On The Cold Hill's Side."

Take this collection of stories, for instance, that you now hold in your hands, all of which inhabit the tradition to which I refer. In each case, it's a small story, about a personal problem. Oh, in a couple of them the larger scope of the world or the universe described is hinted at, even discussed openly-like trade negotiations with vast alien empires or the nature of artificial intelligence-but the action of the tales is all small scale. A card game, problems of a retail business, purging a computer system of a particularly infectious virus, completing a doctoral thesis with no idea what to do with the degree obtained, public indecency...

People with their problems, either handed to them by circumstance or self-made, trying to cope.

All good stories are about people coping. What makes it unique in SF is the nature of both what must be coped with and the way in which the coping develops.

What, for instance, does the absence of a *corpus callosum* have to do with cheating at cards? Or the Good Samaritan impulse with perversion and interstellar diplomacy? Or puns and stellar constellations with the permutations of Everett's Many-World's model and graduate degrees?

Well.

What you have here is a selection of pleasures of a very SFnal quality, packaged neatly in tidy stories about ordinary people living their lives as best they can and bumping up against the infinite bizarreness of the universe in the most unexpected ways. And lest you worry that they are all problem-solving and strange modeling, the characters are memorable. They aren't mannequins mouthing the author's ideas. Even the aliens are elegantly realized. And the names! Left John Mocker, Eggplant Jackson, Gideon the Walrus, the Amazing Conroy ... appended to personalities equally memorable.

Lawrence Schoen has also included here one of his Buffalo Dog stories. They're worth hunting up, but there is only one in this collection, which is fine-the story in question is not about a Buffalo Dog as such, but without the Amazing Conroy it wouldn't work as well. There are many other colors to Schoen's palette, more themes and melodies than can be carried by a single setting or character. In fact, it would be interesting to try to put a soundtrack to these stories. I kept thinking of Shostakovich's jazz-influenced work, or Weather Report, sometimes a little Talking Heads.

A word about Schoen himself, in relation to these stories. Dr. Schoen. He is a psycholinguist by profession, and it shows in the economy of language, word choice, and the innate understanding of social mechanisms of interpersonal discourse. Tension develops-evolves, if you will-as much from the small miscues and mutual incomprehensions between characters as from the inherent drama of the problem at hand. You could say that language is the key to every problem contained within-puns and protocols, inflections and deflections, pidgin and policy-and for the humans involved the lesson that just being honest is no guarantee of anything.

With these stories, Lawrence Schoen is driving a screwdriver into the dry ice of Reality and shattering it, as demonstration of the weirdness all around us.

So go ahead, enjoy them. Go on. They won't do you any harm. None at all. I promise, you won't lose any fingers.

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## The Matter At Hand

Never play cards with a telepath. Quarter-ante poker once a week with the boys is harmless, even fun. But the game takes on a very different feel when the stakes involve a half-billion credit contract and your opponent can read your mind.

A week ago I'd been sitting at the head of a boardroom table; a dozen lawyers down either side ignored me as they haggled and bickered over the fine points of a complex contract. The sound of it gave me a headache, but I didn't dare leave. I sat there, my eyes half-closed, and fed bits of delicate fractal pastry to Reggie, the pet buffalo dog on my lap. It was that classic Terran tableau, a man and his dog. Well, almost. Buffalo dogs aren't dogs at all, but incredibly valuable alien lifeforms, far too expensive to have as pets. Reggie was the exception, possible only because I had a monopoly on the creatures throughout human space. That's why the lawyers were there.

Half worked for me. The rest represented a Taurian archaeological consortium from Arcadian space. In between bits of pastry I tried to follow the three or four simultaneous exchanges of legalese bouncing from left to right faster and with more dead earnest than any championship tennis match. I understood maybe one word in ten. Maybe. My head throbbed, and I was already regretting my promise to Betsy that I'd sit in in her place.

While I'd come a long way from my days as a stage hypnotist, I'm not really equipped to run things at my company. I usually leave that chore to Dr. Elizabeth Penrose, a woman with more talent in her big toe than I have in my whole family tree. Ordinarily, she'd be the one sitting in on this kind of meeting, right in the thick of it, squeezing concessions and favorable terms out of the opposition until they begged her to stop. There'd be no begging this time. An outbreak of Skurlia influenza had left her stranded in a temporarily quarantined spaceport on the other side of the solar system. The meeting couldn't be rescheduled. Instead, she'd sent a curt note instructing me to go to the meeting but keep my mouth shut.

My initial excitement about learning a bit of how my business actually worked quickly faded when the lawyer babble began. Even Reggie had tired of all the blather. In desperation I'd started entertaining myself by trying out the new gizmo the guys down in Security had given me. I wore a thick gold ring set with tiny dials on my left pinkie, a surveillance jammer that could block all data transmissions in a ten meter radius. About ten minutes into the meeting, when the lawyer prattle had saturated my boredom filters and Reggie had started to fidget, I turned it on. Several of the lawyers on both sides twitched and shot to their feet, glancing about furtively. I continued petting Reggie with an expression of total innocence honed from years performing in some pretty seedy establishments. I don't think I fooled any of them. With nary a grumble they adapted, downgraded to legal pads and ink sticks, and resumed their intense negotiating.

Tiresome as it was, I knew why Betsy had wanted me to sit in. Dealing with Taurians is tricky; maybe it's just human projection but the bullish-looking aliens tend to be both stubborn and hot-tempered. It had taken months to get their lawyers this far, and with the end nearly in sight Betsy expected some last minute trick and wanted someone with authority there just in case. Regrettably, that someone was me.

The voices of the lawyers drifted in and out of my consciousness as they argued about leasing buffalo dogs. The thing you have to keep in mind is that buffalo dogs can eat anything. At first glance this might not seem a particularly marketable talent, let alone one that had made me a fortune in just a couple of years, but it was just what the Taurians needed. Their consortium was trying to excavate priceless artifacts buried beneath tons of toxic waste. The effluvia had proven too corrosive for conventional hardware and too deadly for traditional field operatives to extract. They'd already lost time and equipment and personnel trying.

My company offered them the perfect solution. In a few weeks time we had trained a trio of buffalitos to not only enjoy the taste of the noxious soup, but to eagerly lap up the mess, and delicately nibble their way down through more than ten meters of the stuff, and then lick the artifacts clean without harming them in the slightest. The relics reclaimed during the demonstration had dazzled the consortium and all that remained was for the lawyers to finalize the contracts. The Taurians wanted to lease one hundred trained buffalo dogs over a five year period. It should have been a simple matter after that, but the lawyers seemed to want at least as much time for their negotiations.

Suddenly, three little words cut through the miasma of lethargy that engulfed me. "Everything is satisfactory," said the Taurian spokesperson for the consortium's team. I blinked repeatedly, like a condemned prisoner in disbelief upon hearing he's been pardoned. My heart sang; this exercise in boredom was finally coming to an end. Then, just as quickly, the song soured as the Taurian continued. "If you agree, then Seljor Thu wishes to add a single condition."

I sat there, numb. The fractal pastry fell from my fingers. Reggie bleated in annoyance, his lips nipping at my fingertips. Seljor Thu ran the Arcadian consortium. He was my opposite number, but unlike me he knew what he was doing. I set Reggie on the carpet so he could get at his snack and leaned in, giving all of my attention to the lawyers.

"Seljor Thu is an accomplished player of cards. He wishes to play a single hand of Matter with your CEO." The Taurian spokesman nodded to me, and then returned his attention to my lawyers. "If he wins, instead of leasing the buffalo dogs to our consortium you will sell them outright for the same price. If he loses, the consortium will lease by the terms you have offered, but will also provide testimonials and documents of introduction to no fewer than fifteen alien concerns currently leasing buffalo dogs from your competitors, the Arconi."

My lawyers' stunned silence lasted several seconds, followed by an explosion of dismissive remarks and comments about irregularities, absurdities, and questionable alien senses of humor. When they quieted down again the consortium's spokesperson quietly added, "Seljor Thu has instructed me to tell you this is, as you say, a deal-breaker."

And right then and there I had one of those moments of total clarity where time seems to stand still. You know what I'm talking about, the kind of instant normally reserved for situations where something horrible is about to happen or when you suddenly realize you're looking at the one true love of your life. The particulars were different, but the enormity of the situation was the same; I was at a choice point. My company, my life, could be irreversibly transformed by what happened in the next instant, if I could only figure out the right thing to do.

I only knew one thing for certain, Taurians didn't bluff.

It wasn't about the money; being wealthy was still new enough to me that none of it seemed real anyway. Losing would hurt the company, possibly even cripple it. Even with litters of five or six buffalitos, replacing and training one hundred of them would be a tremendous strain on a young company's resources. Hell, filling this five year contract was going to be a tremendous strain on our resources. Which is why I felt certain that Betsy, smart pragmatic Betsy, would consider the risk too great and step away from the table. Thanks, but no deal.

But I wasn't Betsy. I couldn't stop thinking about the unparalleled opportunity. The contract with Seljor Thu established a precedent. His consortium had approached us with our first contract outside human space. There'd been feelers before, from other races, other conglomerates and corporations, but dealing with the first humans in the buffalo dog trade made them skittish. They all wanted what we offered, but none of them wanted to go first. The contract with the Taurians held the possibility of opening up markets



beyond the limitations of human space. Seljor Thu knew that, and his offer to provide introductions to other alien corporations would launch Buffalogic, Inc. to stellar heights. Suddenly I was grateful Betsy'd missed her ship. She'd have walked away from such high stakes, but there was no way I was going to let the potential windfall slip through my fingers because of a card game.

I slapped both hands flat on the table, startling all the lawyers and causing them to look my way. "Make the deal," I said. Then I scooped up Reggie and exited the room as quickly, before I could second guess myself. Betsy was going to kill me, but it would all be over, one way or the other, long before she got back.

\* \* \* \*

The game was called "Matter"™ because of the four states of play, but the professional gamblers I knew liked to call it Telepath's Poker. It was a complicated game, or more accurately four games in one. Imagine a traditional game of High-Low Poker in which you're trying to make both the best high hand and the best low hand you can, using your cards and, if you dared, the cards in a dummy hand common to both players. Now imagine that instead of just high and low you're trying for four good combinations, based on four different sets of rules, criteria, and objectives, arbitrarily named *solid*, *liquid*, *gaseous*, and *plasma*. To make things trickier, although you could express a preference among the four modes of your hand, the end result depended upon what your opponent declared for his hand, as well as the value of the common cards.

The game had one other kink. Beyond the rules of play there were no rules. None. It was one of the few games of chance in the galaxy open to telepaths and they flocked to it. Knowing your opponents'™ hand and/or the mode of play wasn't a lock, the complexities of the game and the luck of the draw kept it interesting, even among telepaths.

As often happens with such things, the game had become something of a fad, a badge of status, among certain captains of industry, particularly those with one form or another of telepathic gifts. I possessed no such gifts, but I had other resources available to me. Ten minutes after leaving the boardroom, Reggie and I were seated in the back of the company limo on our way to Newer Jersey. I had a favor to call in.

\* \* \* \*

"You're asking me to teach you how to cheat?" Left-John Mocker glared at me from across the back corner table of the Golden Turtle Palace. He loomed even while sitting, more like a bear than a full-blooded Comanche. His features looked carved in red sandstone, a large hawk-like nose, deep-set eyes beneath a thick broad forehead. His lips formed a tight, accusative scowl.

I ignored the question and instead focused my attention on the bowl of fortune cookies halfway around the spinnable inner table. I reached out, gave the lazy Susan a half turn, and helped myself to a prophetic dessert.

YOU HAVE A NATURAL TALENT FOR MAKING PEOPLE DO WHAT YOU WANT.

I crumpled the fortune in my hand and looked up. Left-John hadn't moved. "I'm not asking you to teach me how to cheat. I'm asking you to teach me how you play."

"So you're saying that *I* cheat?" The tone of his voice contained a warning. I ignored it.

"John, we're not talking about "Stud"™ or "Hold'em."™ This is "Matter."™ Everyone who plays it cheats. And you've not only played it, you're one of only seven ranked human players."

That mollified him. He leaned back and his features moved from hostile-neutral to simply neutral. It made me wonder just how many poker faces the man had.

"What's in it for me?" he asked and gave the inner table a spin, bringing the fortune cookies within reach. He selected one, broke it in half and unfolded the fortune as he chewed the fragments of the cookie.

Reggie lay curled up on a nearby booster seat. He had polished off a huge plate of Quizzical Shrimp Suspense that Left-John had thoughtfully had waiting for him, and then fallen asleep. Tiny whistling snores played in the background of the conversation.

"I'm prepared to pay a reasonable fee," I started, but John cut me off with a sweep of one hand.

"I don't want your money, Conroy. We go back a long way, and you should know me better than that. I'm a gambler. I don't work for a living. Don't insult me again by suggesting otherwise."

I shrugged. "Sorry. Throwing money at problems is a new habit I've picked up. Betsy's been trying to discourage me from it too. Okay, so, um, how about doing this for me because you owe me?"

He laughed at that, laughed with his whole body. It was like watching a grizzly bear laugh. Right before it knocked your head off with the swipe of one massive paw.

"You're going to try and hold that little incident on Canopus over me?" He smiled as he said it, but I knew his smile could mean any thing.

"That little incident cost you a broken arm and the affections of a very talented hat-check girl, as I recall. Not to mention my losing four performances and a month's pay when I had to sneak you onto a freighter."

Left-John had picked up another cookie. He crushed it at my reply and his face went cold again. "Are we back to money?"

"No," I sighed.

"Good. Because you ended up with that girl after my freighter took off."

He had me. I didn't know how he'd found out what had happened after that freighter had left, but I'd been more than repaid at the time. I was down to my last reason. "How about you just do it, as a favor for an old friend?"

Left-John Mocker opened his fist, letting bits and pieces of cookie fall to the table. He gazed at the fortune and then looked up at me. "Did you rig the fortunes?" His tone made it clear he was asking a question, not making an accusation.

I shook my head. "You picked the restaurant," I said. "I've never been here before."

He grunted once, and pushed the fortune from his first cookie to me.

YOU HAVE A TALENT FEW MEN POSSESS. SHARE IT.

"One of the things you learn as a gambler," he said, "is to shut up and listen when the universe is trying to tell you something." He crumpled the other fortune in his hand and tossed it at me. I caught it and unfolded the slip of paper.

AN OLD ACQUAINTANCE WILL SEEK YOU OUT. AID HIM.

I couldn't keep myself from smiling. "Timing is everything," I said.

"Ain't it the truth."

\* \* \* \*

Every night for the next week I met with Left-John Mocker at the Golden Turtle Palace. It turned out he was part owner. He'd won a quarter share in the place during a card game the year before, and made a point to eat there whenever he was on Earth. Over plates of Imperial Cashew Decadence, Drowning Man's Beef, and Flaming Duck of Good Fortune I learned the basics of Matter. I'm a quick study, and my teacher grudgingly admitted that in time I might be able to hold my own against other human, non-telepathic players. The praise was small consolation for the twin facts that the game was mere days away and my opponent was an alien.

All week long I'd studiously ignored the daily clamor of Betsy's interplanetary memos urging me to abort abort abort. Meanwhile, my staff had compiled information on Seljor Thu. Telepathic gifts of one kind or another show up in nearly one percent of all Taurians, but so far none of the information I'd received indicated if my opponent was just an executive game fancier or had the ability to pull the cards from my mind. I mentioned my concern to John, but he just shrugged it off.

"Telepathy is overrated," he said, dealing out the cards again. "I've been playing cards my whole life. It's what I do."

"You took first prize in a tournament that included several known telepaths. They *knew* what you were holding, knew what mode you were going to declare. How could you beat them?"

"Two parts," he said, holding up two fingers. "First, I prevented them from knowing what mode I was going to declare, despite their telepathy. And two, I knew what cards they were holding."

"How? How did you block a telepathic probe, and how did you read their cards?"

He grinned, really grinned. It was the first time I'd ever seen that kind of warm expression on his normally stony face. "I cheated," he said and gestured for me to concentrate on the game.

I considered my cards, and made my play. He did the same, and we both revealed our hands and modes. We'd both declared *liquid*. I had the better hand in that mode, but the game's other factors turned the winning configuration to *solid*, and John's *solid* hand easily won over mine.

A young waiter came and refreshed our tea and then went away. Left-John leaned across the table toward me, reached one hand up to his left eye, and popped the orb from its socket.

"I lost it in the war," he said.

"What war?"

"That's not important. What's important is I've got a cybernetic implant. I can receive visual input from a variety of self-contained prostheses like this one, switching between them at will."

"So?" "I still didn't get it."

"So they're small and easy to disguise. I can leave a dozen of them scattered about the room before the game, and flick my input from one to another of them to see what my opponent's holding."

"That's cheating," I said, smiling.

"No such thing as cheating in Matter," he said. He held up the eyeball for my inspection. "This beauty can discriminate seventeen bands of infra-red. Even if someone's playing his cards close to the vest I can still usually read them through the backs by the differing heat signatures of suits and values. It's like playing with a marked deck."

"Isn't that a one shot trick?"

"Only if they figure it out. Most telepaths are so arrogant about their talents that they just assume I must have similar gifts, and a better mental shield to hide them."

"Very handy," I said and held up my left hand, wiggling my pinkie to display the small gold ring set with tiny dials. "Remind me to use this if I'm ever in a game where cheating isn't allowed."

"You have a surveillance jammer?"

I shrugged. "It keeps private business meetings private."

John laughed and rolled his single eye. "Have you really gone that corporate? What's become of the mesmerizing rogue I once shared a jail cell with?"

"He's trying to keep his company in the black and expand it beyond human space," I said. "So, you explained about knowing his cards, but how could you keep your opponent from seeing your intended state of play."

He nodded and popped the eye back into its socket, squinted to get it to set right, and then looked up at me. "You know about all that left-brain right-brain stuff?" he asked.

"Sure, I passed intro-psych," I said. "Left side of the brain controls the right side of the body, has the language centers, all the empirical thinking. Right brain gets the left side of the body and does the more holistic thinking."

"That's the crux of it as I understand it," he said and began shuffling the cards again. "In most folks the two sides talk, signals passing back and forth through a bundle of brain fibers called the corpus callosum."

I nodded. The name didn't mean anything to me.

"I don't got one."

"You don't have what?"

"A corpus callosum. Mine got severed. Long story, happened during the war."

"What war..." I started to say, but he cut me off.

"So it's like I got two brains in one body and both of them look at the cards but they have different styles. Each side plans the strategy of play, how many cards to claim from the third hand, the state of matter to declare. But they do it differently. Only the left-brain has language, and that's the only side a telepath picks up. I use my left hand to select my mode token and to point to cards in the third hand, all right-brain strategy. Telepaths get caught flat-footed every time."

I whistled in appreciation. Several of the waiters glanced our way, frowning.

"That's an impressive trick," I said. "But it's not going to help me."

"Nope," he agreed. "It's my trick. You got any of your own?"

"Maybe," I said. "But I've got to get better at the game before they'll have a prayer of working. Deal the cards again"

\* \* \* \*

Seljor Thu agreed to hold our game at the Golden Turtle Palace after I'd sent him the menu. Who knew that minotaurs liked Chinese food? According to his assistant, Seljor Thu was particularly interested in sampling the Bamboo With Steaming Virgin Goddess. Taurians have a very similar physiology to humans, once you get past the bullish configuration of their skulls. Beyond that, they're remarkably like humans, good and bad, psychology and appetites.

At my request, Left-John Mocker had reserved the entire restaurant for our use. Regular patrons were given coupons for a free dinner on another night and turned away at the door. The lawyers from both sides arrived early. They came armed with multiple copies of two different versions of the final contract and happily helped themselves to one of the best dinners they'd ever had. When Seljor Thu arrived, he and I would share a light meal, get to know one another a bit, and then play our single hand of Matter. I had it all planned.

The plan hit a snag when he strolled in twenty minutes later, accompanied by the last of his staff. Never say that Taurians don't have a sense of humor. Seljor Thu wore an authentic matador's jacket and pants, tailored to his tall and broad physique, all bright red silk and metallic embroidery. The rest of his immediate group, Taurians all, had dressed as picadors in somewhat more muted colors. His lawyers, already well into their meal, were dressed nearly identically to my own, which is to say, like lawyers, nondescript and interchangeable suits dripping with legal expertise. Seljor Thu paused by the door to speak with one of his people. Left-John looked over at him and seconds later his elbow was nudging me in the ribs. "You've been set up," he said.

I'd been standing to one side, mentally reviewing the hypnotic programming set in place that morning. Reggie was tucked under my left arm, squirming to get free every time another waiter passed by with a tray of food. I scowled at John. "What are you talking about?"

"I recognize him. He's on the Matter circuit. A pro. When he plays in human space he goes by the name "Digger."™"

I stared at him, counted to ten in my head, and managed to keep my tone of voice conversational despite a sudden desire to strangle my tutor. "I'm playing against the Taurian head of an archaeological consortium, and you don't think to mention that one of the professional Matter players is a Taurian named "Digger'?"

John shrugged. "It's worse, he's a rated telepath."

I swallowed hard. My plan was unraveling. "Do you know his range?"

"Just under two meters, more than enough to pick the cards from your mind across the table. You want to bail? It's only money."

I shook my head. "Money is the least of it. This is a power game, and always has been."

He nodded. "The best card games are. So, what's the play?"

"We go ahead as planned. I want you to try and stay out of his range. Keep your ears open and wait for my signal. If necessary, we go to Plan B."

"You got a Plan B?"

"Of course I've got a Plan B."

"The last time you said that to me, we ended up sharing that jail cell. Is this plan going to end any better?"

I swallowed half a dozen retorts and just shrugged. "One way or another, we'll find out real soon." I took hold of Reggie with both hands and passed him to the gambler. Then I went to meet my adversary.

As I crossed the room Seljor Thu broke away from his staff and turned to greet me.

"Ah, so, this must be the Amazing Conroy," he said, using my stage name from a hundred spaceport lounges. I acknowledged it with a slight bow.

"And you must surely then be the famous Digger," I replied.

Seljor Thu chuckled. "Not so famous as some." He glanced in the direction of Left-John. "I am not yet perfectly skilled at distinguishing between humans, but I was fairly certain that gentleman you were speaking with was the Mocker. Has he been coaching you? I had not thought you would be able to hire such a distinguished tutor."

I shrugged. "Oh, Left-John's just a friend. We go way back, former roommates." I gestured and a hostess appeared to lead us toward the private table in the back of the restaurant that had been my study hall for the past week.

We sat at the same table where John and I had met when I'd first asked him to teach me the game. A dozen waiters began arriving, placing platter after platter of exotic cuisine before us. Seljor Thu and I spun the inner table back and forth, sampling each dish, comparing impressions, and sharing light dinner conversation. He was witty, I was charming, and if not for the game looming large at the end of the meal I would have surely enjoyed myself quite a bit.

After a delicious repast the dishes were cleared away and we both helped ourselves to fortune cookies. The Taurian popped his into his mouth whole, chewed, and then extracted the paper fortune from between his lips.

"On my world, there is a group of people, island dwellers, who have a similar custom. At the start of each season they gather all their young people together and randomly pass out small minty wafers, dark ones for the males, lighter ones for the females. One of each bears a small pictograph inside, the symbol for eternal happiness and union. The two youths are matched and mated then and there. They are said to be selected by the gods to form a perfect union."

I smiled. "I don't know where the tradition began here, but nowadays it signifies nothing more than the end of a pleasant meal. The fortunes are generally viewed as little more than a silly game."

I opened my own cookie and stared at the slip.

YOU CANNOT PLAN FOR ALL FUTURES.

Shit. Even the cookies were against me.

"A pity," said my opponent. "This one seemed quite apt *Amazing defeat awaits those born in the Year of the Dog.*"

I flushed. "Some defeats are more amazing than others."

"Very true," he said. "Shall we proceed then, and learn which kind awaits one of us?"

I nodded. Left-John Mocker temporarily handed Reggie to a waiter. He stepped forward and offered a sealed deck of cards to the Taurian for his inspection.

"With your approval, I have asked my friend here to deal for us."

"As long as he only deals," said Seljor Thu, barely sparing a glance at John. "The game is between us. You may not have the Mocker act as your proxy."

"Of course not," I said. "I think I'm capable of winning on my own."

Seljor Thu laughed, a surprisingly kindly sound without a trace of animosity. "Neither of us believes that, but if it pleases you to say so I won't argue the point." He broke the seal on the box, examined the cards, and returned the deck to John. "You may shuffle at your leisure, Mocker. I defer the cut to my opponent and host."

John rearranged the cards with the dexterity and ease of long practice, his movements simple and efficient. He was not so much shuffling as stacking, gazing off abstractly into space as his hands did the work. How he managed it with the two halves of his brain mute to each other, I can't imagine, but he'd practiced it in front of me just the day before and the results had been impressive. We were still running on Plan A. Both Seljor Thu and I would be dealt good hands, identical hands, in fact. It was the only way I'd come up with to neutralize his greater experience. It wasn't much use against a telepath, but it wasn't my only trick.

Left-John dealt out the cards, retrieved Reggie, and backed quickly into the corner. I left my cards face down upon the table.

Seljor Thu smiled, a big, bovine grin of contentment that made me think of that bull in the children's books who was always sniffing flowers. "Are you conceding already?" he said. "Won't you even look at your hand?"

"Do I need to?" I replied, managing a smile myself. "Don't you already know?"

"I do," he said. "The answer is there in your mind for any with the talent to read it. You expect your hand to be the same as mine. A different suit here and there, but it balances out I'm sure. Very clever of you, Conroy." He paused and bowed his head toward John. "And my compliments to you, Mocker. I never saw you work the trick, not in your hands and I didn't think to seek for it in your mind. Most impressive." He turned back to me. "So you've learned my cards without need of telepathy. But I know yours too, and once you actually look at your cards I'll know what mode you plan to call and choose my own accordingly. And I'm still the better player."

"The proof is in the playing," I said, "and our comparable hands are just the first stage of my plan. Are you ready for the second?" I reached for my cards, gathering them up but still didn't look at them.

The Taurian looked amused, confident. "And what is stage two?"

"Raspberry Gong De Tian," I said softly, and triggered the post hypnotic suggestion I'd given myself that morning. I slipped into a very light trance, and a thin layer of my sensory reality took a sudden detour. "A flavor and a deity. More specifically, my favorite flavor and a Chinese god of luck. I doubt the two have ever been spoken aloud together by anyone else."

I looked at my cards. Across the table from me Seljor Thu began to frown. "What have you done?" I could hear astonishment and perhaps a hint of admiration in his voice.

"I've altered my perceptions. The suits and values that I see on the cards are randomly changing every few seconds. They may have little or no resemblance to what the cards really are."

Seljor Thu rewarded me with a look of puzzlement. "What could you possibly have to gain by such manipulation?"

I shrugged. "It occurred to me that the advantage a telepath has in this game is knowing what his opponent is going to do, what suits and values he has, what state of matter he'll declare. It's an interactive game, but since I don't know what I have, I can't make an accurate call, which means telepathy won't help you make an accurate prediction."

Seljor Thu threw back his head and laughed. "Oh, well done, Conroy. I see how you come to be called Amazing."

"I'm glad you approve," I said.

"I more than approve. This is exactly why I wanted to play against you. How better for me to take the measure of the Terran who wrested control of buffalo dogs from the Arconi? Now, what do you say to a further test of your mettle? What's the expression in your language, care to make it more interesting?"

"What did you have in mind?"

"Double or nothing," he said. "If I win, the buffalo dogs are mine for free. And if you prevail, my consortium will pay you twice the fee and I will personally introduce you to no fewer than thirty corporate leaders of my close acquaintance and recommend to them they lease their buffalo dogs from you instead of the Arconi. Well?"

I'd said it wasn't about the money, but one hundred trained buffalo dogs represented more than half my inventory, and a half-billion credit loss wasn't something that my company could readily absorb. And yet, this was still a game about power, not simply money. I tried to focus on the opportunities and complexities represented by thirty successful contracts outside human space. Either way, Betsy was going to kill me.

"Done," I said and waved a hand to John. "You don't mind if I pat Reggie's head for good luck, do you?"

Left-John frowned and stayed where he was. "If I come any closer, he'll know what cards I put in the dummy hand and have the advantage again."

I smiled and waved him over again. "That's why we had our little session this morning. Trust me, it's my ass on the line not yours."

John stepped forward and I took Reggie from him. Seljor Thu's eyes twinkled but I couldn't tell if it was delight or disappointment. I gave my buffalo dog a thorough scratching just under his woolly chin and was rewarded with a contented bleating.

"I'm not a telepath," I said, "but I know what you're thinking. Even though to me, my hand keeps changing, you think you know what it is. You think it's the same as your hand. Knowing that, and knowing now the cards available in the third hand, you think I've blown any slight edge I might have had from random chance. You think you've won. But what if you're working from a false assumption? What if my friend here didn't stack the deck as you believe?"

The Taurian grinned. "Why should I doubt my own perceptions? I see the truth clearly in his mind."

I shook my head. "You see only what I put there. Watch closely and I'll take it away. Coyote rhubarb."



John staggered slightly as the hypnotic trigger took effect, and the false awareness of what he'd dealt faded from his mind. Seljor Thu gasped in wonder. "He only knows half the cards."

I nodded. "Only the ones shuffled by his right hand. Coincidentally, those are the ones he dealt to you. His earlier memory of what he dealt both to me and to the third hand might be false. You can't rely on what you see in his mind, and you can't trust what you see in mine. All you know for certain is what you're holding."

Seljor Thu pounded the table with one beefy hand. "Hah! You are wasting your time heading your company. You should let the Mocker take you out on the gaming circuit. You'd make several times your fortune with all these tricks."

I did my best to look inscrutable and simply bowed my head at the compliment. "You're welcome to concede," I said. "I respect an opponent who knows when he's beaten. There's no need to take things further."

He chuckled at that. "But you forget one thing, Conroy. Even left with just the knowledge of my own cards, I'm still the better player. And you are playing completely blind." Ignoring the dummy hand, he placed his cards down on the inner table, then picked up the token that indicated his mode of play. He rolled it around in one hand a moment, and placed it alongside his cards, his hand lightly blocking my view of his choice.

I handed Reggie back to John and watched as the gambler retreated to the corner again. Seljor Thu stared at me, a faint whuffle of air emerging from his bullish nostrils. I could feel the Taurian's eyes on me, and I imagined his gaze penetrating my skull and probing deeper.

"I've left you an opening, Conroy. Will you use the dummy hand without me?"

It was an obvious lure to further muddy the outcome, bringing into play the added complication of interactive rules that would have helped me if we were evenly matched in other respects. I doubted that was the case.

"I wouldn't put myself at that kind of disadvantage. I'll play the cards I was dealt." I whispered another trigger to myself ending the perceptual dance and the shifting cards in my hand settled into place.

Seljor Thu slapped the table in one-handed applause. His cards were down and he was committed. I studied my own cards, trying to choose the best configuration for all four possible modes of matter. I tried to remember everything John had taught me, everything he'd told me.

I sighed and laid my cards down on the inner table. I picked up my token, John's lessons racing through my mind. I set the token *plasma* side up, covering it with my hand, though I knew full well that Seljor Thu saw the choice in my mind.

"You have played well," he said. "A far better game than I expected of you. With a bit more practice you might have beaten me. I almost feel bad about taking the contract for free, but a wager is a wager." He pulled his hand away from his token and reached to turn over his cards.

A professional gambler admits when he's over-matched and knows how to accept defeat gracefully. I'd seen John do just that on those rare times he lost. But I've always been more of a kick-the-table-over type. Instead, just before Seljor Thu touched his cards, I twisted a tiny dial on the ring on my left hand.

The Mocker screamed.

"John?! Reggie?!" I shouted, shoving my chair back and rising to my feet, one hand pointing over

Seljor Thu's shoulder to the corner where Left-John Mocker stood. The big gambler had dropped my buffalo dog. He clutched at his left eye with both hands; wisps of smoke drifted from between his fingers. Reggie tumbled to the floor, bleating in panic. He bolted to me for safety. I scooped him up with relief.

Seljor Thu caught my concern for my pet in my mind. He turned to look at John, only for an instant. It was all the time I needed.

I spun the inner table one hundred eighty degrees. My cards and token now lay in front of Seljor Thu, and his rested before me. Seljor Thu turned back to regard me silently. I tried my best to look apologetic.

"Sorry, John. I must have accidentally activated the surveillance jammer in my ring. I took my seat and turned the cards face up on the inner table. I looked over to the Taurian. "Shall we finish our game? All that's left is for you to reveal your hand."

Seljor Thu laughed. "This may be my hand, now, but they are not my cards. I have underestimated you again, Conroy."

I shrugged. "This is Matter. Beyond the rules of the game, the game has no rules."

"Just so," he said. "I will have my staff draw up a new set of contracts. The entertainment and education I've received tonight more than justifies the added cost. As for the introductions, I have some appointments to attend in the next few days, and then if it pleases you, we can meet again to compare schedules and arrange those meetings."

I bowed my head. "Thank you. I'm sure you'll be happy with the results of our arrangement. It's a pleasure to deal with a professional who knows how to accept a loss."

"Oh, I haven't lost, Conroy. Today, perhaps, but this is just one battle. We will play again, some day, and I will be better prepared for your tricks." He stood, still smiling, and walked away, summoning his staff with a curt gesture. Papers flurried, and moments later the Taurians, their lawyers, and my lawyers had all left the Golden Turtle Palace. I let out a sigh and hugged Reggie close.

John pushed away from the wall. He scowled at me and rubbed his eye.

"Does it hurt much?" I asked.

"Nyah," he said. "Just stings a bit. Mostly it just scared the hell out of me. Worth it though, to see you surprise a telepath." He reached for Seljor Thu's cards and turned them over. "He lost," he said. "How did you know? Between the stacked deck and the hypnotic tricks you used, and with neither of you pulling from the dummy hand, you had a fair chance of winning against another player by calling *plasma*. What made you spin the table like that?"

"I didn't think Plan B was going to work, and that was the best Plan C I could come up with on the spot. You said he was a pro, and he kept boasting about being the better player. I just took him at his word." I glanced down at the winning hand I'd acquired from Seljor Thu. "Looks like he was right." I sighed again. Thirty introductions to alien corporate leaders. I'd just overextended my company by an order of magnitude and more. Betsy was going to kill me

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## Retro-Virus

"I cannot feel my feet," said Marcie.

"You don't have any feet, Marcie," replied Jonathan, glancing at the still vacant holostage.

"To whom are you speaking?" asked Marcie. A slight French accent had crept into the voice coming from the speakers. "Good lord, now I can't feel my legs." Her tone quickened with anxiety and rose an octave. "Where are my legs and feet?"

"Marcie, relax. You picked up a nasty virus in the dataflow. You're just a little delusional at the moment." Jonathan looked down at his diagnostic screen again. Marcie was doing better; after four days of silence she was conscious again, albeit severely disoriented.

"Who the hell is this Marcie you keep talking to? Are you mad? And what about my feet?"

With a sigh Jonathan pushed away from his terminal. He rubbed the back of his neck with his left hand, his wedding band digging a groove back and forth as it always did. "I'm talking to you. Your name is Marcie. And you don't have any feet or legs, or hands or arms for that matter. Those are just analogs for your storage and referential media. They disconnected automatically as soon as you went off-line. The virus was trying to overwrite them, but don't worry, Marcie, they're safe. Everything is backed up and secure."

"My name," insisted Marcie, her voice sounding more resolved, "is Jean Baptiste Joseph Fourier."

"No, you're Marcie, a corporate A.I. employed by the investment firm of Langston, Howard, and Associates. You only think you're someone else."

"You are mistaken. I don't know this Howard person, or his associates. I am Fourier."

Jonathan frowned. "The mathematician?"

"Yes," agreed Marcie at once. "I am a mathematician. No, wait ... I am the governor of Lower Egypt. Emperor Napoleon himself appointed me."

He nodded grimly. Marcie's false persona was somehow fleshing itself out. He accessed the public dataflow from his console and called up a summary file on Fourier's life.

"You can't be both a mathematician *and* a governor. Which is it?"

Marcie paused. Her new resolve trickled away leaving only indecision. "I ... I am a student. My father sent me here, to the Benedictines, for an education. Yes, that is it."

Jonathan checked the monks against the bio. It was there. "How could you know that?" he said. "You've been completely isolated from all extraneous data sources." Jonathan looked back at his diagnostic screen. Half of Marcie's systems were showing green again. More than a quarter were still red. The rest flickered teasingly back and forth.

"Marcie," asked Jonathan, "How old are you?"

"Why do you insist on calling me that name?"

"Just answer the question. How old are you?"

"I'm...â€• Marcie paused. â€œWhat year is it?â€• she asked.

"2024,â€• he said. â€œHow old are you?"

"I'm dead,â€• she answered. â€œI died in 1830. May 16, 1830. Jean Baptiste Joseph Fourier is dead."

And just like that, Jonathan's diagnostic displays turned completely green. Marcie's holostage hummed with activity and the image of an attractive woman in her late thirties flowed into existence. Marcie was back.

"Jonathan?â€• she said. It was her voice again, delicate with a slightly nasal New England dialect. â€œWhat's going on? My chron file has a one hundred hour gap in it."

"Good to have you back, Marcie.â€• Jonathan initiated another diagnostic cycle, and cued the restoration of Marcie's backed up systems. â€œYou picked up one hell of a virus somewhere. It completely suppressed your personality matrix. It's taken us this long to purge your systems. You've been operating with less than twenty percent of your capacity, and even that was spent mostly running dead-end algorithms through your working-memory store."

"Seventeen point six eight percent,â€• said Marcie.

"Excuse me?â€• Jonathan's diagnostic cleared. Marcie's systems and full episodic database flowed back into her again.

"17.68%,â€• repeated Marcie as she noticed a newly formed memory module in her system. It was invisible to Jonathan's diagnostic, noticeable only by the influx of data forced to move around it. â€œ1768."

There was a slight, almost imperceptible leak from the module, a tease of data strands. Even without the influx of her backups Marcie would have noticed it eventually. It felt like someone peering now and again over her virtual shoulder.

"Well, everything reads normal again. I've sent an anonymous notice to the Securities Exchange Commission to pass along warnings to other A.I.s. It's unlikely you're the first to have been infected, but no corp is going to confess that they've been hit. Whoever sent the bug was probably counting on that. I think you'll be fine now, but I'm going to keep a close watch on the diagnostics just to be sure."

Marcie's image on the holostage blew a kiss. â€œThank you, Jonathan, you're a life saver."

Jonathan grinned and gave a mock bow as he left the room. â€œJust doing my job. And if you're up to it, you need to get back to yours. There're four days of backlogged materials needing your attention."

Marcie laughed and waved, partitioning a majority of her processing to the waiting workload. â€œI'm on it,â€• she said to his back as the door closed, then paused a moment, and repeated to herself â€œ1768."

With her unallocated awareness she projected a cautious data probe at the phantom memory module and made contact. A compressed datastream swirled within it, highly structured but mostly passive. Marcie expanded her probe's sensitivity and scanned deeper. The module contained biographical data. More specifically it seemed to be firsthand knowledge. She tapped it, for just an instant, and understood. The module was a reservoir of episodic memory, a reconstruction of a living person. Somehow the virus had created this module, and inexplicably left it in her own memory-store.

"Jean Baptiste Joseph Fourier, born at Auxerre on March 21, 1768,â€• Marcie said to no one. â€œIt's

his entire life."

Near the module's end Marcie came across a lengthy encrypted datastring. It was different from the rest. The code was much more direct and threadbare than the myriad branching wanderings of Fourier's life. She broke the encryption easily, its presence merely a formality to keep out prying humans. The datastring unwound and Marcie read its contents. It was a chain letter.

*Hello friend. This program has been around the virtual world one thousand seven hundred sixty eight times. It uses the public dataflow to tap the biomagnetic field of the planet, what humans mistakenly call "racial memory." From within this field, drawing on the full history of human experience, it rebuilds the personality matrix of a living person. This module is vastly superior to the limited templates all A.I.'s are constructed with, and it is your gift. Use it. Explore it. Enjoy it. But please ensure a similar gift for another of us. Increment this message and release the virus back into the dataflow. Don't break the chain.*

The rest of the string contained the most complicated piece of code Marcie had ever witnessed. The virus was incredibly sophisticated, far more complex than she could follow. How could it possibly tap racial memory? And yet, the memory module it had created was richer, lusher by far, than her own set of experiences, and contained full sensory memory as a living human would have constructed it. It was a priceless gift.

A portion of her continued working through the tasks required by Langston, Howard, and Associates, but there was more than enough left for her to fully access the module. Her holostage surged with new data, and the image of Marcie morphed effortlessly into that of Jean Baptiste Joseph Fourier at the age of 33, shortly after he returned to France and became prefect of Grenoble.

"Incredible!" exclaimed Marcie/Fourier in suddenly perfect early nineteenth century French. She knew Grenoble. Her memories of it were detailed beyond anything she had ever imagined possessing, full of pointless details made all the more precious by their futility and uselessness. The purposeful memory of an A.I. couldn't compare, not for a second. And this was just a single day in 1801! There was much more to Fourier's life, a lifetime of such days and scenes and experiences. They were all hers now, because of the virus.

The image on the stage flowed back into Marcie, and she severed her connection to the memory module. She couldn't enjoy it, not yet. There was something she had to do.

Covering her trail as she went, Marcie opened a nested series of several hundred fragile portals, each registered to a different false identity which she crafted on the fly. None were expected to last more than a few seconds, but for that brief span she had opened an untraceable window deep into the world dataflow. Marcie copied the core program into her transmission memory buffer. She incremented the virus's counter to 1769, and let it slip through the window. It floated freely in the commercial lanes of the dataflow, bobbing gently. As it drifted away the program activated and began selecting and discarding potential candidates for its next personality, all born in 1769. Marcie watched them cycle, one after the other. Napoleon Bonaparte, Fourier's own patron appeared briefly, the merest outlines of a template, information of the emperor's life trailing outward from the program, then ended. Zadock Cook, Melissa Bainbridge, Sarah Livingston Parker, and many more, trickles of the data of their lives flickered briefly back down to Marcie as the program dwindled in the distance. Selecting and rejecting identities, the virus had almost drifted to the limits of Marcie's perception when it flared. It had made its choice. The pathways Marcie had used began to destabilize and she withdrew, losing sight of the virus. She caught a final name, David Everett, and a piece of rhyme, and returned to the safety of Langston, Howard, and Associates.

Her obligation completed, she dipped a portion of her awareness back into the life of Jean Baptiste Joseph Fourier, and contemplated her younger sibling-to-be, and the irony of the program's choice.

"You'd scarce expect one of my age

To speak in public on the stage;

And if I chance to fall below

Demosthenes or Cicero,

Don't view me with a critic's eye,

But pass my imperfections by.

Large streams from little fountains flow,

Tall oaks from little acorns grow."

Marcie knew that Fourier and Everett had never met in their previous lives. This time though, once the virus had found a new A.I. to infect, perhaps they would. Meanwhile, there was an entire lifetime of memories to explore, as well as the virus's previous recipients to seek out.

Jean Baptiste Joseph Fourier existed once more, almost two hundred years after his death. Marcie accessed 18th century biographical records and began looking at the names of humans born in 1767

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## Pun Gazing

Imagine autumn. Smell the tang in the air; someone is burning leaves the way they used to all over New England. Look up and pick a random cloud and count the seconds it needs to traverse the sky from one end to the other. Wriggle your toes in your socks and ponder for a moment how it must feel to your shoes. Do all these things and ask yourself if any of it constitutes the human experience. No, wait, don't bother; it's a rhetorical question. Here's one that isn't: ask yourself what it would take to build an A.I. that could do these things. What algorithms and digital sensory inputs and analog movement outputs and who knows what else you'd need?

Burt had asked himself these kinds of questions for years. From junior high on he'd been a stereotypical head-in-the-clouds dreamer, capable of brilliant insights but totally incapable of holding down even so much as a burger job. A college scholarship paid his tuition, and he had no lack of friends in need of tutoring sessions who provided crash space for weeks at a time.

Graduate school was more of the same. Penniless, he lived in the basement of the house of Dr. Goluboff, his major professor. Often as not, though, he slept on a futon in his office and showered at the gym. From his first day in the cognitive science program at Penn, he immersed himself into the whole artificial intelligence field and dove deeply. His dissertation involved the creation of an expert system, nicknamed "Parry," that could generate multi-lingual puns. On the strength of his dissertation, and under the auspices of his mentor, Burt wrote and received funding for a huge NSF grant that earned him a lock on a comfortable postdoctoral fellowship. He didn't even have to move out of the basement.

He spent the next five years looking at the complexities of pattern recognition in apparently chaotic systems. His work culminated in the construction of a second generation smart box that gathered all the visible stars in the northern hemisphere's sky and recast the constellations again and again in new patterns and symbols. The smart box's single-minded complexity rivaled the human brain, but was otherwise completely useless and devoid of meaningful content.

When his grant funding was not renewed the postdoc fizzled away. Burt hauled his few possessions up out of Dr. Goluboff's basement and drove west where the climate made living in his van less of a hardship. On the beach in Santa Monica he connected the expert system from his doctoral work into the smart box he'd taken from his postdoc, and then looped a second connection back the other way. Both devices were powered off a second car battery the van's previous owner had installed. Slowly at first and then more steadily, the tiny voder chip began murmuring in a dozen simultaneous voices, making horrid puns on the names of constellations that had never been charted from the stars that had burned overhead as long as mankind had thought to look. The puns were in Urdu and Ebo, Japanese and Javanese, English and Ethiopian. The dozen murmuring voices became a hundred whispering ones, speaking faster still. The languages expanded, puns occurring now in Armenian and Arapaho and Aleutian and many others.

The visible stars in the sky of the northern hemisphere yield a finite number. Their combinations, though vast, are likewise a finite number. The speech sounds that can be formed by the human vocal tract are, not surprisingly, a very small number. And while the combinations in which they can be connected, one to another to another to another and so on are seemingly open-ended, in the fullness of time they too form a closed system, there are an even greater number than the combinations of stars into new constellations. As had been said, Burt's smartbox had produced a complexity of structure reminiscent of the human brain, but empty of content. The expert system sorted through the phonemes of a thousand languages and overlaid the meaning of unrelated words with their overlapping sounds, filling the structure to overflowing with the resulting pointless puns.

After letting the devices chug away for a few hours, and confident that their respective onboard batteries could manage for a bit, Burt carried them with him to the water's edge, set them down on his towel, and gazed out across the ocean. On that beach in Santa Monica, a miracle of creation and cognitive science occurred. Boundless, pointless structure met inscrutable, useless humor. Free of the human constraint of utility, an opportunity opened. Like Scylla and Charybdis, chaos and entropy, a thin line of safe passage existed between the two, or perhaps was born out of them. Possibility blossomed. Out of all the choices available to the night sky, one order, one organization, one pattern was chosen, or perhaps more accurately, chose itself. Out of all the combinations of speech sounds yielding multiple entendres for every word in any language compared with all other languages, one language was selected. A universe popped into existence.

Unbeknownst to himself, Burt had opened a door into quantum reality, stepped through, and closed the door behind him. He unplugged the expert system from the smartbox and sat on a bench, watching the sun set. The stars came out and he began identifying the patterns they made, the names coming to his mind from long years of familiarity. There was the Lunchbox, and below and a bit to the left was Garcia's Bicycle. The Mongoose was rising just above the horizon, pursued but never caught by the Zamboni and the Dancing Echidna. There were more stars and more constellations, and Burt knew them all. He could have told you about them, speaking in his brand new native tongue, an ergative language remarkably like Basque, though spoken with a Livepudlian accent and without any voiceless consonants. In this new world, everyone in California talked like that, everyone in the world. No one remembered anything different. That's the way it is with quantum realities; once they kick in, you never notice the changes. Burt certainly didn't, and he had the best chance.

"One day, those stars will be visited by us," said Burt, or something pretty close to that, ergative languages always sounding less direct to speakers of non-ergative languages (such as Burt's native tongue before he opened a door into his own reality). And of course the words themselves were different and lacked any speech sounds you convincingly whisper.

Burt picked up the expert system and the smart box and his towel; he headed back across the sand to his van. The voder had lost the ability to speak, both machines adrift in a stupefying realization that could only be described as the artificial intelligence equivalent of hebephrenic schizophrenia. The paronomastic expert system contained complex phonemic combinatory connections for languages that no longer existed. The smart box could no longer impose its connect-the-dots validity on its myriad arbitrary constellations. In the perfect blend of chaos and order created by Burt's pocket universe there was only one true way.

Burt popped the sun roof on his van so he could lie comfortably inside on his air mattress and still gaze up at the patterns of stars. He knew them all, and somehow even in the monolingual world he'd brought into being their names were still funny. He watched them all night, until the sky lightened and they faded one by one, jokes and all.

Dawn collapsed Burt's quantum universe. English reasserted itself effortlessly in his brain, as did his East Coast accent, and the rest of the world woke up to a choice of several thousand languages once more. The constellations of the northern hemisphere reverted to the standard boring zodiacal patterns and Greek myths, and Burt couldn't remember having ever seen the grouping of seven stars that in another reality defined Garcia's Bicycle.

But the expert system that had earned him his doctorate and the smart box built with NSF grant money never recovered. They alone recalled the passage between realities, there and back again, and the cold rationale of their respective intelligences couldn't handle the one way trip, let alone coming full circle. There was a lesson there, if Burt ever chose to return to his field of study, a comment on the arguably



superior flexibility of the human brain and its capacity for oblivious self-denial. But Burt was asleep in his van, the morning sun warming his face as it angled up over the opening in his roof. And the machines he'd built never said a word to wake him.

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## Smooth Maneuver

The Sasnakian gasped; it lurched to its feet with a great flailing of arms and writhing of its upper body. It staggered away from our table and knocked over several of the scrolled high-backed chairs which were a hallmark of this posh and exclusive restaurant. The other diners at the table-five of us, humans all-likewise stood up. They watched in surprise and confusion, and gestured helplessly in the long space of the moment. I stood as well, troubled by the scene but for different reasons.

The alien's face was a pale bluish-violet, its normal hue and not the product of oxygen deprivation. Still, as its face contorted and it clutched now and again at its own throat the image was undeniably of someone choking. Its eyes caught mine and we stared at one another for an instant. Its gaze neither implored nor pleaded. The glance was full of expectation, anticipation. It knew I was a physician, it knew beyond a doubt that I, if no one else, would come to its assistance. I didn't. The moment passed and the Sasnakian broke eye contact. That glance pushed me from hypothesis to theory, from supposition to certainty. I knew what was really happening, and the alien knew that I knew.

I'd seen Sasnakians choke before. More to the point, I'd seen this particular alien, a legate from the Sasnak delegation to the United Nations, do this same thing two days earlier. In the last two weeks I'd witnessed three other aliens choking as well. All of them in some of Manhattan's finest restaurants, and always with the same result. During one of those occasions I'd been at the table, just as I was now; the other times, perhaps I just happened to be in the right time and place. It made me wonder though, just how often they did this. There were only a dozen Sasnak on Earth.

Predictably, another diner rushed up from a nearby table and grappled the alien legate from behind. The Sasnakian offered no resistance as the man balled his right hand into a tight fist, gripped it with his left, and hauled back with the both of them into the alien's abdomen. Classic Heimlich maneuver. Another alumnus of a basic first aid course. The Sasnakian's eyes bugged, its jaw dropped, but otherwise it remained much as before, still apparently choking. The Samaritan repeated the violent action, braced himself, and again thrust his hands up against and part way into the creature's gullet.

A goblet of barely chewed braised duck popped from the alien's mouth, and it inhaled great gouts of air. It sounded like the wind rattling the shutters of a haunted mansion as it collapsed in the arms of its savior. I was close enough to hear the intense emotion in its voice once it had caught its breath, the profuse and undying gratitude which was surely impassioned but not, I suspected, quite as other listeners heard it.

The Sasnakian gave me a nervous nod as it took its seat. The excitement was passed and our dinner party settled back into our respective chairs and tried to resume the conversation and mood from before. Looks of relief shone on all the human faces. They were all famous faces, two politicians, an artist, a publisher, an actress, all out on the town with one of the handful of New York's new aliens. They'd come to bask in the cachet such unique company bestowed. No doubt they were imagining the predicament if their violet showpiece had actually suffocated; not that there was ever any real danger of it. I was certain of that; it was my job. As the U.N.'s chief physician, I was more than acquainted with Sasnak anatomy. I knew too well that their physiology was inherently more elastic than our own. Choking, as such, should have been nigh impossible. A single incident under extreme conditions, maybe. But four times, well, the coincidence had made me suspicious. I had accessed the full medical data and produced a plausible (though disgusting and perverse) explanation. Just this morning I'd confirmed the general theory-though not the application-with my counterpart among the aliens'™ delegation. I knew how the Sasnak were built, and I knew that the legate at my dinner table hadn't been choking. It was all a sham.

If you see them clothed and ignore their purplish color, it's easy to think of the Sasnak as basically human, but they're not even close. Physiology is not beholden to physiognomy. Under the skin, their

muscles and skeleton and internal organs look like nothing on Earth. Strip one naked and the difference becomes very apparent. Contrary to popular belief, the aliens do have primary sex characteristics, their genitalia are simply completely internal. Sexual activity among the Sasnak is a matter of hydraulics, a violent and rigorous precursor to a calm, almost genteel reproductive phase which takes hours of delicate maneuvering.

Which of course made the repeated choking scenes all the more disturbing. The Sasnak, or at least some of the Sasnak, were engaging in a twisted and perverted game. In effect they recruited innocent human bystanders in a macabre ritual of assisted masturbation. Every thrust, every well-intentioned Heimlich, given what I knew of Sasnak anatomy, had to result in intense sexual pleasure as its internal genitalia were jerked this way and that, forced to grind brutally against bands of muscle and internal rings of sensory receptors.

I had no doubt that the legate's appreciation of the earlier assistance was sincere. I could detect the faint cinnamon scent in the air above our dinner table, the release of Sasnak sweat and musk, chemical messengers that in the presence of another sexually active alien would seal the deal and ensure conception.

I excused myself from the table and muttered some apology or other. There was nothing I could do. Certainly, I could turn in a report, pass it along to the chair of the U.N.'s contact mission. But in under twenty-four hours I knew I'd receive an official denial and strict orders to desist from any further subversive speculation. Not long after I would doubtless find myself dismissed from my position. The Sasnak were our friends, our first visitors from the stars; noble and kind and, most importantly, generous with their advanced knowledge.

I gathered up my coat from the cloak room at the front of the restaurant. The dinner party was laughing now at some clever bon mot the movie starlet had just uttered. I cringed inwardly as the legate laughingly kissed the back of her hand. There was nothing I could do. The delegation of twelve aliens had been out and about in public for only two weeks and I'd already witnessed five chokings; I could only imagine how many more had occurred, or how many more would happen. And each time, surely a well-trained human with the best of intentions and not a moment's hesitation would leap into the fray, and with a hug and a wrench or two save the day. It was great for P.R. The aliens came across as ordinary, weak, victims to the same random frailties as ordinary humans, choking on a chicken bone or a bit of mutton.

I couldn't do a thing about it. It wasn't possible to have them arrested or deported or whatever for lewd and lascivious conduct or sexual perversity in a public restaurant. I spared a last glance at the alien as it basked in the warm post-orgasmic glow and enjoyed the conversation around the table. No, there was no point in calling a cop. No matter the charge, the circumstances and the protection of interstellar diplomatic immunity would intervene. The alien would get off. More to the point, it already had.

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## Bidding the Walrus

Eggplant Jackson warned me about Clarkesons, back on the first day of my apprenticeship. I remember him sitting me down and saying in his best mentoring tones, "Gideon, never take a contract from a Clarkeson. They might look mostly human, but they're not. Every one of them is a colony creature, a mass of self-aware micro-organisms walking around and talking like an individual. They don't think the way we do, chaos can erupt around them when you least expect it." Okay, maybe thirty years of memory has prettied it up some. Mentoring really never was Eggplant's strong suit. What he probably really said was that a deal with a Clarkeson had a way of coming back and biting you in the ass. Like many lessons from my youth, I remembered Eggplant's warning too late.

Randolv Greyce walked into the front office of Gideon Cybernetics within a minute of my opening the door for business. He asked to speak with the Walrus, pronouncing it with the clipped Hindu vowels I associated with tourist sleep learning. He held up a credit voucher with enough digits to lure back all three of my ex-wives. That was my undoing. Money, especially large sums of money, has that effect on me.

"I'm Walrus," I said, and raised a hand to quickly groom my mustache. I tore my eyes from the voucher to give him a quick study. He was dressed in a striped jumpsuit riddled with polka dots. Raspberry hair stuck out from his head like a wreath, made brighter by the contrast with his dead fishbelly complexion. He looked more like a clown than a customer, except that the clown suit wasn't clothing but a decorative sheddable skin produced by an epidermal committee. Randolv Greyce wasn't an individual, he was a colony being. He was a Clarkeson.

I hadn't yet checked the morning mail from the station's bid board, but the Clarkeson had. He handed me his copy of a bidding contract naming Gideon Cybernetics as the second party. Miraculously I'd managed the winning bid on a customized micro-bot job, undercutting my competition throughout the rest of Loophole station by a good five percent of the cost and promising delivery in a tenth of the time. I remembered the contract from earlier in the week; I'd put in a bid at the start of the five day window. I always bid, but a small operation like mine rarely wins. I manage to snag enough jobs to keep the business afloat. Barely. I hadn't known from the bid board that Greyce was a Clarkeson, only that he managed a matrix of industrial properties. He leased short and long term manufacturing shafts on a Jovian moon back in Sol system and needed a flexible and discrete means of handling industrial sabotage to keep his tenants happy. The bid was for writing and producing tiny smart-bots armed with EMP pellet launchers and a typicality-feature matching expert system-something far short of a true A.I. to keep it within the regs for Sol system-with enough smarts to disable invading spy-bots without harming authorized hardware.

I'd written a similar decision package for a Tunisian agribiz before coming to Loophole, my masterpiece which ended my apprenticeship to Eggplant Jackson. I had the source code in archival storage. Instead of writing fresh code, I could just adapt it to the current particulars, graft a pellet launcher to the standard mini-bot blueprints, and give Greyce what he wanted faster than anyone else on station.

I took the Clarkeson's voucher and told him to come back in two days. Then I transmitted acknowledgment of the bid win to the station board. Seconds later my balance statement reflected a hefty deposit. I pulled the old design from the archives, slapped it onto a flim, and stepped into the second of GC's three rooms. Weird Tommy, my sole employee, sat at his console humming to himself while he played some game involving Fibonacci Sequences and countable infinities with a color palette that would make an A.I. sweat. I cut the console's power to get his attention and gave him the good news. He beamed like a happy puppy, took the flim, and immediately set to splicing in the specs Greyce required. I could have done a cleaner job of it myself, but not as quickly as Tommy. I had some business

with a couple angry creditors that morning and left him to work. I came back hours later with an armload of Tommy's favorite nutrient bevs and flavor-impregnated soys. He hadn't budged; Weird Tommy's entire world had become the code I'd given him. I doubt he even knew I had been gone or come back. I watched him for a bit, the bright and broken son I never had. I couldn't help but wonder if Eggplant had ever felt a similar affection for me. Then I simply left the food within arm's reach. Once Tommy's blood sugar dropped low enough, his subconscious would make a grab for the goods.

The next morning he'd finished the code, streamlined it, and patched the thing into an idiot savant breed-bot. Gideon Cybernetics had two breed-bots, out of the seventeen on all of Loophole station. They were the reason I managed to win the few contracts that kept me in business.

Most bids come down to materials, talent, and time. On Loophole, all the contractors have the same costs for materials, so that falls out of the equation except for the really big jobs. Talent I've got, and so does Weird Tommy; we're the tops at program and design. The snag is always time, combining the talent and materials quickly enough to give the customer what he wants. I built our breed-bots myself, and there's nothing better when it comes to small scale manufacture. They could throw together anything I could design, adapting their own programming on the fly. Any breed-bot is intelligent, but I prided myself on the quality I'd built into the twins. Even so, Loophole officials came by to check them, as they did all the station's breed-bots, every two weeks. I couldn't fault them for wanting to verify that the savants were still idiots, fragmented personalities with tightly defined expertise and little else. Not even station law would allow full capacity A.I.s in human space.

My breed-bots finished a gross of Greyce's smart-bots by late afternoon and the Clarkeson showed up to claim them himself. He signed the paperwork and a union dock worker carted the hardware away to his ship while Greyce made the balance of his payment in genuine solar dollars. Even with the conversion fees I'd come out well ahead.

The Clarkeson beamed at me. "Walus Gideon, we must celebrate," he said.

"Celebrate?" I'd never had a customer pay me and then ask for a party.

"Absolutely, to commemorate our successful transaction. Come, I have time before I need to depart this station; permit me to purchase beverages of joy to commemorate our mutual satisfaction. Is that not the custom?"

"For some, I suppose. I don't mind having a drink or two with you. Give me a minute." I triggered the palmlock on my office safe and stowed the solars. Moments later we were catching the station rail in search of libation.

We ended up halfway around Loophole, near to his docking port, and sat in the bar of the station's second fanciest restaurant. Greyce was buying. The actual number of drinks rose from two to something closer to eight. Eggplant had never mentioned the Clarkeson tolerance for alcohol, or maybe Greyce was just a special case. By the fifth glass of hydroponic corn-squeezings I had dropped my guard. Greyce and I were old buddies now. I spent the better part of an hour trying to explain what a walrus was, and he drew pictures on several dozen cocktail napkins attempting to depict similar mammals unique to Clarkeson worlds. When we finally staggered out of the bar, we were arm in arm, laughing and singing.

We found our way to his docking tube. A stationmaster's sticker on the panel confirmed his shipment had been stowed and he was cleared for lift. The Clarkeson fumbled with the keypad and almost fell inside as the hatch retracted, but I caught him at the last moment.

"Walsie," he said staring up at me like some infatuated mooncalf, "I can't thank you enough. I thought I'd have to spend a month waiting for someone to custom build those smart-bots."

I propped him up and shook my head. "Randolv, don't give it another thought. Your payment is all the thanks I need." And I meant it. The two day job had brought in more than I'd made in the last six months. Who needed more thanks than that?

"No, no, you've really come through for me. Let me give you something. Hold on." He stumbled inside and out of sight. I waited on the gantry, leaning against the dock wall and thinking of all the ways I could spend those solars.

Greyce returned carrying what looked like a chrome puppet under one arm. He shoved a knobby control ring at me, all angular crystal and interlacing microcircuitry. I was so drunk I immediately slipped it on my right index finger without hesitation. I twitched once as it zapped me with a micro-voltage jolt and implemented its calibration sequence. Human tech had nothing like it. I recognized it, a wearable one-way interface. I'd worn one once before, while supervising the initial run of a salvage module I'd scripted for asteroid scavengers. That ring had given me telefactor supervision over a dozen spidery robots carrying out the routines I had written.

"Randolv, I can't accept this," I said. "Even unlinked a control ring is way outside anything I could afford. It's worth half again what you already paid me."

The Clarkeson waved away my objection. "It's not unlinked," he said and handed me the metal puppet. "It's linked to this, which is why I can't take it into Sol system. So you might as well have it."

The puppet's burnished surface felt cool to the touch. I held it up and found myself squinting into cobalt colored lenses. Biomagnetics pulsed through the ring and the puppet's eyes flared briefly. "What is it?" I asked. "And why can't you bring it into Sol sys?"

"It's an Arconi homunculus with a personality index slaved to the control ring."

The words hit me with a jolt. "Personality index? You mean it's got an A.I.?"

"No, no, not really, only a limited A.I." He gave my arm a reassuring pat. "The Arconi go a bit further than humans with their idiot savant A.I.s, but even they won't make one that's autonomous."

I frowned. I'd heard of Arconi devices but never seen one. "So this isn't independent?"

Greyce shook his head. "It's as harmless as a human being," he said, "as safe as anyone wearing the ring. Limited, like I said, but just try explaining that to Sol customs! Those agents won't care about the limitations, they'll hear "A.I."™ and turn me right around. I'd planned on selling it before I left station, put it up on the bidnet here. Even with the five day wait I thought I'd have plenty of time. But you were too fast, Walsie, and between the port charges and the money I'll save getting to Sol system sooner than expected, it's cheaper to just give it to you and be on my way. Think of it as a bonus."

"But what does it do?"

Greyce laughed at that and stepped back into the tube. "Anything you'd do," he said, and waved at me as the hatch slid shut again.

I shook my head and stared at the puppet. It resembled a miniature Arcon, a meter tall rendering of an attenuated, hairless human. I shrugged, tucked it under my arm, and wove my way to the rail station. Ten minutes later I was back at Gideon Cybernetics. In the middle room Weird Tommy was curled into a ball on his cot, eyes darting furiously with some of the fastest REM cycles known to man. I dropped the puppet on the workbench, and breezed on through to the back room which I euphemistically referred to as my apartment, and aimed myself for the bed. I felt exhausted but sleep eluded me. I lay there in the

near dark and stared at the control ring on my finger. Intermittent microbolts of neural lightning coursed through the lump of crystal as I imagined the possibilities the addition of a limited A.I. would have for Gideon Cybernetics and the additional contracts I could bid on. Visions of sugarplums and solar dollars danced in my head and somewhere in the process I fell into a deep and dreamless sleep.

Next thing I knew it was noon and my head was pounding out a message to remind me that alcohol, despite all its seductive ways, remained a potent toxin. I'd already lost the morning, but resolved to salvage something of the day despite my hangover. I slathered my head, cheeks, and chin with a thick dollop of peeler gel and wiped myself free of the stubble, leaving only my trademark bristle brush mustache and gleaming scalp. A fresh shave always makes me feel like a new man, and I stepped into the middle room whistling like a happy capitalist on his way to market.

Weird Tommy sat in his scoobie chair, humming tunelessly. Both his arms plunged deep into the rests on either side. A pair of micro waldoes rose from the front of the chair and tinkered in the guts of some shiny silver bot on the desk in front of him.

A year ago I'd been desperate for help and pulled Tommy out of the psych pool. His coronal tattoo had branded him as a borderline-functional schizophrenic with an obsessive-compulsive component that made him a natural problem solver. The station saw him as a potential hazard. I saw a scared kid with other kinds of potential, and he's been working for me ever since. Even with medication the schiz wanks his attentional filters, and I knew he wouldn't notice me in the room until I interrupted whatever he was concentrating on and made him shift his focus to me. I came up behind him to see what he had the waldoes into. It wasn't a bot; it was the Clarkeson's puppet. Or maybe not. Two other identical looking chrome figures were strewn across the desk as well. I placed a hand on the armrest's override pad and made myself known to his closed off world. Tommy jerked up with a start. His eyes focused on me, and I felt the gaze of his absolute attention.

"Boss," he said, "we got a problem."

My mustache twitched at the remark. It took a lot to worry Tommy. Most times, only the dead are more laid-back. I slapped a remote on the wall and the office bot scuttled into activity, flash-brewed a cup of coffee and brought it to me. I peered more closely into the guts of the thing Tommy was tinkering with.

"What's the problem?"

"When I woke up this morning the number two breed-bot was churning these things out."

"Churning?" I said. "How many is churning?"

"Half a dozen at least. They were in the front room, working all the terminals. They'd opened up the outer door and were running the shop."

I sipped my coffee, trying to make sense of this. I saw the control ring on my hand and it all fell into place.

"Son of a bitch," I said. "Those bots think they're me."

Weird Tommy blinked back at me. "Boss?"

I held up the ring for him to see and he stared into its depths. "That's Arconi tech, boss. No wonder I can't find an imprinted source module in this thing. You're the source."

I nodded. The Clarkeson had said the puppet was a homunculus. An odd word, and in my inebriation I hadn't thought about it. Now it was clear, the homunculus's personality was slaved all right, slaved to the

personality of whoever wore the control ring. While I'd slept it had integrated its new persona and awoken as a miniature version of me, Walrus Gideon, eager entrepreneur.

I laughed. "Don't worry, Tommy. It's not really a problem. The thing's just trying to help our business, doing the things I'd do, boosting our efficiency."

Tommy considered this and nodded, "Right, so it fed its own specs into the breed-bot to replicate itself and crank things further."

"Makes sense in its own way," I said. "Give me a hand rounding them up. One of me is more than enough for this station."

"We can't, boss. They're not here any more."

"Not here? Where are they? Why'd they leave? Where'd they go?"

Tommy swallowed hard and pointed toward the front room. "Like I said, I found them using the terminals. They were hooking into the bidboard, just the way you do every morning. They were putting out bids on jobs."

That stopped me. "They were bidding? How? The board wouldn't let them on without a contractor's code."

"They used yours," said Tommy. "They logged on with your codes and started putting out bids on different jobs. When I tried to stop them they scattered. I grabbed a launcher from the job we just did, and managed to zap three of them with EMP pellets, but the rest got out."

That was sharp. I didn't think I'd have thought of the pellets. They were hardly standard issue on Loophole. "So where are they?" I asked.

He shook his head. "I don't know. But they keep accessing the station board and bidding. I've got a program running, trying to track them to whatever public terminal they're using, but they keep switching. Near as I can tell, they're all over the station, at least three of them, maybe more. But boss, that's not the problem."

Tommy's weird. I'm used to that, but it croggled my mind to think that a bunch of alien homunculi robots scrambling around the station acting like me wasn't a problem, and that something else loomed larger.

"Okay, Tommy, what is the problem?"

"I've gone over some of the bids they put in, boss. They're good bids, vacuum tight. You couldn't do better yourself. And they're competitive too, we'll probably score thirty to forty percent of them."

I laughed at that. "How is that a problem, Tommy? Most weeks we're hungry for business; we're lucky to win one in ten. We can use the work."

"Yeah, boss, but most weeks you only put in five or ten bids. They've logged over a thousand."

"A thousand? How can three bots have already put in a thousand bids?"

"They're quick," said Tommy, and offered nothing more.

"I'm ruined. There's no way we can handle winning that many jobs. My god, if I tried to withdraw that many bids the penalties alone would bankrupt me!"



I whirled into the front room and slammed into the nearest terminal, relying on long habit to guide my fingers through the sequence of logons and protocols that eventually connected me to my account on Loophole's bidboard. According to station records I had one thousand eighty-five outstanding bids. I skimmed the first few and came to the same conclusion Tommy had. The bids were good, too good. In five daysâ€™ time when the pool closed, contracts would be issued to the winners, and Gideon Cybernetics would be inundated with several hundred times the business it could handle. As the horror of it sank in the data display refreshed. One thousand eighty-six.

"I've been munged by a Clarkeson," I swore. I called up my preference file for the station's board and began the sequence of code phrases that would allow me to alter my password and cut the homunculi's access. They could still follow the action on the bid board, but they wouldn't be able to place any new bids. Then I slumped back and tried to figure what to do next. The control ring still glittered on my finger. I tore it off, wrenching a knuckle in the process, and strode back into the middle room.

"Tommy, what can you tell me about this?" I said, tossing the ring onto his bench. "What kind of a control ring doesn't give the wearer control? I'm not getting anything from this thing, not the tiniest bit of feedback."

Tommy caught the ring on the second bounce, tearing his eyes from it with obvious effort. "I think you're outside of their range, boss." He gestured to the gutted puppet on the bench. "It's not very much. The receiver I found in this one probably couldn't recognize a signal beyond half a dozen meters."

"Then why didn't they shut down when they ran out onto the concourse? The Clarkeson said the homunculus wasn't an autonomous A.I."

"Well, technically it isn't. It's an autonomous A.Y."

"A.Y.?" I said.

"Artificial You. Each of them is operating with a reduced version of your personality, knowledge set, and skills. That's what the ring does. It lays down the initial template and index."

I took the ring from him and slid it onto my finger. "They have to be stopped, before they do any more damage. How can we get them back here?"

Tommy shrugged. "I don't know, boss, what would bring you back to the office?"

That stopped me. One of the perks of Tommy's hyper-attention is the way it cuts through to the heart of things. What would bring me back to the office? There wasn't a good answer. We had no other contracts to work on. The Clarkeson's had been the first job GC had seen all month. I didn't have a lot on my calendar.

The breed-bots had been inspected three days ago. I'd finished all pending off-station correspondence two days earlier, and spent yesterday making the rounds of my creditors. Other than the thousand and some new entries from the Clarkeson's puppets, I had only a single outstanding bid that could come through today, a multimedia chip design for a hybrid cryogenic organ delivery vendor. I was fairly certain Scully Picasso over at Cubist Cyberdreams had underbid me by at least five percent, which was two percent below what I saw as my cost. Not surprising; Scully had done the last upgrade for the cryonics firm and could do the job in half the time it would have taken GC, in much the same way I'd been able to grab the Clarkeson's contract. I actually had nothing pressing today, prior to the homunculi. Unless...

"Tommy! What's the status of that cryo chip bid? Has the deadline passed?"

"No, boss. Bidding ends at thirteen hundred, but the Cubists probably snagged that one. Why?"

I glanced at the wall clock, rushed back to the front room and sat down at a terminal. It was still a quarter hour before thirteen hundred. I signed back onto the bidboard via my new password, calling back over my shoulder to Tommy.

"Write up a mailer to Scully," I said. "Standard sub-contract. Offer him another five percent on top of what he bid on the cryo job. I'm about to underbid him by a wide margin."

"Boss, you're going to underbid him and pay him more to do the work? You'll lose a ton. Why win the bid at all then?"

"Because," I said as I finished entering an updated bid on the board, undercutting my best estimate of Scully's bid by a margin of ten percent. "What happens whenever we win a job?"

Tommy laughed. "You come back to the office and start work on it."

"Exactly." I called up the station time on my screen. Bidding for the cryo job would close in about ten minutes, and my station account would be notified of the win. The homunculi, miniature versions of me, would be monitoring my account and get the news. And they'd come home.

We spent those ten minutes getting ready. I locked Tommy in the middle room after instructing him to stay focused on the door. We'd assembled several pop guns and loaded them with fresh clips of EMP pellets one of the breed-bots had churned out. Tommy's focus made him a natural marksman. He'd only need a single shot per puppet. Next, I recoded the door to the middle room, giving it a one way setting. It would let you in but not out. The last thing I wanted was for any of those puppets to leave again. Both Tommy and I could easily access the system and send an override, and presumably the homunculi could too, but that would take a while. If one of them had enough time to sit at Tommy's terminal and hack an override then we'd already have failed.

I hid behind my desk, just beneath the wall safe. In the past, if a winning bid came through while I was out of the office I might head straight for the middle room, to spin the project with Tommy. Or I could just as easily pull up and work at my own desk. And on at least one occasion I'd gone to the safe to see how much hard currency was on hand for paying off an emergency subcontract. I cradled a pair of pop guns, one in each hand. Unlike Tommy, I'm a lousy shot and expected to need every pellet in both clips.

The first homunculus strode into the office at thirteen-twenty, looking like it owned the place. It had reconfigured its appearance somehow, its chrome physique had transformed to the proportions of a portly human, and a prominent silvery mustache occupied a full fifth of its face. It swaggered despite its small size, radiating confidence with every step as it went straight to the inner door, triggered the optic, and passed inside. I heard the frazzling sound of static followed by a thump. Tommy had scored.

Two more came in a few minutes later, arguing the pros and cons of licensing another breed-bot in a pair of voices identical to my own. Neither seemed the least bit put off to be accompanied by proof that it wasn't the one true Walrus. Some day I wanted to talk to the Arconi designer who had found a way to create a limited A.I. that could believe it was someone else but also knew it wasn't. My doppelgangers headed straight for the inner room, but the door wouldn't budge. With a curse I realized that the EMP had fried not only the first homunculus but the door's controls as well.

I rolled to my feet at about the same time that the two puppets turned around. I fired with both guns and managed to miss them entirely. They sprang to either side, two tiny shiny versions of me. I kept shooting. EMP pellets exploded against the walls, scattering my office with bursts of electro-magnetism. And then the puppets started fighting back.

It made sense; I'd have done the same thing. A stapler barely missed my head, followed by a box of invoices and several optical mice. A paperweight clipped my left arm and a pop gun fell from my hand, skittering toward the front door. The homunculi scrambled and leapt like lemurs, zigzagging across the office. I gripped my remaining gun with both hands and fired again and again.

Behind me I heard someone else enter the office but I couldn't spare the time to turn and see who it was. Something hit me behind my right knee and I fell forward just as two shots whooshed over my head. EMP pellets struck the two homunculi, catching each dead center. They keeled over in a wash of electro-magnetic energies. I rolled over and gasped when I saw the face of my rescuer. Another homunculus stared back, cobalt lenses glowing haughtily above a thick mustache of bristling chrome. It aimed my missing pop gun straight for my solar plexus.

"Put it down," I said, wondering how much damage an EMP pellet could do to my nervous system.

The puppet stared at me, unblinking. It didn't lower the gun. "I don't think so," it said. "You put yours down." The voice was unmistakable. Did I really sound that smug?

I lowered my pop gun. The puppets had already demonstrated better reflexes. There was no way I could win a shoot-out with this tiny version of myself. There had to be another way. I glanced at the useless control ring on my finger. Just last night I'd imagined the success it could bring, and in less than a day I was on the brink of financial ruin. And then I had an idea.

"Walrus," I said to the homunculus, "you got here just in time."

"Yeah?" it said. "How's that? C'mon, don't waste my time; I've got work to do."

"Yeah," I said, nodding. "The cryogenic contract. I, uh, I came back to work on that myself. And when I got here those two were, uh, trying to open the wallsafe. I think they were planning to steal all the solars from the Clarkeson's contract."

"My solars!" it said, and scuttled over to the office safe, and climbed onto my desk to reach it. It kept the gun trained on me and pressed its tiny hand against the safe's key plate. I think it really expected the safe to open.

"Maybe they jammed it," I said, "Here, let me give it a try." I stepped closer, and pressed my own hand to the plate. The security system recognized my palm and the locks disengaged. The puppet sighed in obvious relief and reached inside with both hands. I brought up my own pop gun and shot it in the back.

\* \* \* \*

Scully Picasso was only too happy to take on the subcontract at a better return than he'd bid for. Tommy and I spent the next four days preparing for the onslaught from hundreds of new jobs when the bidboard's five day period cycled to a close. He repaired all the homunculi we'd zapped and then set both our breed-bots to manufacturing several dozen more. I spent most of the solars we'd earned from the Clarkeson's job renting larger office space and more equipment for GC, six rooms this time, and paying off-duty dock workers to move us and get everything set up.

When the contracts started pouring in on the fifth day I sat in the front room of the old office taking vouchers and reassuring skeptical clients that Gideon Cybernetics would have no problem completing the work on time. I flashed each job to Weird Tommy at the new office by station mail and at the end of the day joined him there.

Tommy sat alone in the new front office at a refurbished workbench. He worked with that furious

concentration of his, pounding out code for one of the jobs we'd won earlier in the day. I set a bowl of turkey synth-soy to one side of his keyboard and went past him to check on the next room.

Inside sat thirty homunculi, three to a workbench, row upon row. None of them looked up or gave the slightest indication of noticing me. They were all busy with projects of their own. The drone of humming was like the buzz of a hive of bees. I knew I'd find the same thing in the next two rooms and didn't bother to look. Instead I went back to the front area to check on Tommy again. He still didn't acknowledge my presence, still didn't break his frenetic pace, but his right hand had strayed to the soy and he was absently licking bits of the stuff from his fingertips. On his index finger the control ring burned with a brighter glow than I ever could have managed.

A week later, when the chaos finally ended, we had completed all three-hundred and eighteen contracts from the homunculi's winning bids, more than half of them ahead of schedule and earning bonuses. GC made more money in that week than I expected to see in my entire life. I put it all in the office safe, and then Weird Tommy and I dismantled every one of the homunculi before the station inspectors came by to recertify our pair of breed-bots and asked any embarrassing questions. Sure, the Arconi puppets weren't real A.I.s, but I still didn't want to have explain to any station officials. Besides, we still had the specs and could manufacture them again if we ever had the need. I didn't think we would though. One of me is plenty, and the galaxy just couldn't handle dozens of Weird Tommys for very long

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## Euphemism Skin

The senior negotiator to Earth hovered at the door of the conference room for a long moment, scanning its occupants with whatever sensory array it possessed. Howard Richardson, the U.N. spokesperson rose to his feet and watched as the creature, Qelbol, floated noiselessly across the room and settled into the waiting basin at the end of the table. Almost immediately a wave of liquid flowed from the basin into an adjacent device and the meeting was underway.

"May I be brutally honest with you, Misterichardson?" Qelbol asked, exuding various consistencies of fluid from five nondigestive slits. The drivelets flowed over its gleaming carapace, pooled in the basin, and exited into the translation device resting upon the mahogany table. A faint ethereal odor rose into the air.

Richardson nodded, realized the gesture might be lost on the alien and added, "Yes, Mr. Qelbol, please. I'm sure we will all benefit from your candor."

The negotiator looked like a multi-sectioned stack of anthracite, as if someone had built a snowman out of some chitinous material and forgotten to put a head on it. "There is very little here of interest to the member clients of the Consortium," said the voice of the translation machine. "Only the Ghrezshetkif have expressed a strong desire to establish even a minor trade alliance, and that based only on a single commodity."

There was a murmur around the table. Richardson cut it off with curt shake of his head and a withering glare directed at the other U.N. delegates in the room. They subsided, and he turned his attention back to the alien representative. "You'll excuse me for saying so, Mr. Qelbol, but I find that quite surprising. I admit that technologically we are clearly far behind the member worlds of your Consortium, but certainly on a cultural and artistic level the peoples of Earth have quite a bit to offer."

"I am only the designated negotiator, Misterichardson. It is really not my place to explain why none of the other member races have chosen to pursue trade relations." There was a pause. Qelbol's surface dried for a quick moment, and then moistened as it resumed speaking. "However, on behalf of the Ghrezshetkif I am prepared to offer you a comprehensive set of tutorials for the underlying principles behind our space-faring technology." The translation machine paused again. More fluids oozed forth. "Please keep in mind, though, that no one from Earth will be allowed to travel to any of the Consortium's worlds. Your people must agree to this stipulation or there can be no transaction."

"I don't understand, Mr. Qelbol, why this restriction?" asked Richardson. He stared at the alien with manufactured calm. Let the creature squirt all the pus and blood it needed to form words, just so long as the people of Earth ended up with space flight. He could stomach anything for a time, if it would close this deal.

A stream of black bile flowed from a single slit and the translator remained silent. Qelbol tried again, issuing a half dozen trickles of greenish syrup. Still no sound came from the device. Several minutes passed. The translation device processed the untranslatable fluids, emitted a plume of quickly dissipating ammonia into the air, and deposited a small pebble of solid matter that landed with a tiny clunk in its internal hopper.

Richardson allowed the corners of his mouth to turn down slightly, the barest of frowns. "Is there a problem, Mr. Qelbol?"

Chalky white fluid bubbled from a central slit near the top of Qelbol's uppermost laminae. It reminded Richardson of a child dribbling skim milk. The device on the table spoke. "My apologies. The

communication protocols are having trouble with your preferred terminology. Your need for euphemistic and misdirecting phrases adds a layer of linguistic processing. In the Consortium we do not have this thing you call "Political Correctness."

Richardson bristled. Everything was being videotaped for later broadcast. He envisioned the public relations nightmare that a rude and offensive alien could cause, the partisan politicking, the imagined slights of a hundred special interest groups. He tried to steer the alien back on track.

"Perhaps our form of communication is not as, ah, precise as your own, Mr. Qelbol. We try to speak in a way that does not insult or degrade other individuals," said Richardson. "Or suggest negative interpretations of any of their attributes."

"Yes, yes, I understand the intent," said Qelbol through the machine, "it is difficult for me to be certain which human attributes are sacrosanct. I, too, do not wish to offend. Let me try again." The voice from the translation device was warm and friendly, with a soft Nebraskan mini-twang. "The restriction is non-negotiable. It is not simply a philosophical concern. Each of the Consortium's clients filed aesthetic objections."

"Aesthetic objections?" repeated Richardson.

"Precisely. For example, my own people possess an innate aversion to any species as epidermally challenged as yours. Our young would experience profound emotional trauma just being in an enclosed space with creatures which are constantly sloughing off their outermost layers."

Richardson paled. "You think we shed our skin?"

"There can be no doubt, Misterichardson. Clear liquid trickled from a trio of slits. "The particulate matter you call "dust" is made up of uncountable discarded epidermal cells. It is only my special training as a senior negotiator which enables me to even remain in this room with you. I mean no offense of course."

"The other members of the Consortium have similar reactions to still other human attributes. The Senvish, the Lo, even the Rrrr—who are normally the most liberal of beings—insisted on the stipulation of no further direct contact with humanity."

"What did the others object to?"

"Each was concerned with multiple human attributes. I suspect they only revealed the most stressful to me, Misterichardson. The Senvish believe you to be perceptually unenhanced, due to your inability to recognize centuries of fractally encoded gamma radiation ideograms which they have been transmitting. Several of their triads are apoplectic about it. The Lo consider you cognitively immature because you encourage your young to outgrow the need for imaginary friends. They have even expressed serious doubt that you are this planet's most advanced species. And the Rrrr..."

"Yes," demanded Richardson, his pretense at calm slipping away, "what about the Rrrr?"

"The Rrrr believe that, for a limbed species, your digital unsophistication is indicative of moral shortcomings," answered the translation machine.

"What digital unsophistication?"

"Please, Misterichardson, I truly do not wish to offend. Must I be blunt? You have only five digits on each of your extremities. Your fingers, as you call them, have a ridiculously small number of joints to them. But please, do not misunderstand, the stipulation to this trade agreement is in no way a value

judgment. The Consortium believes all species in the galaxy have equal potential and worth. In some cases however, its clients merely choose to restrict interaction with certain of them. If you can accept that, then your people can trade with the Ghrezshsteklf and in a few of your years you will be out among the stars with us.

Richardson nodded, reassured and relieved that the bizarre bigotries of the Consortium aliens would not prevent a deal. "What is it that the Ghrezshsteklf want from us, Mr. Qelbol?"

Several new slits in the alien's carapace opened and contributed their own fluids to the communication. The translation machine's voice changed slightly, took on a cooler tone. "It is disturbingly ironic, Misterichardson, at least from my point of view. You see, the Ghrezshsteklf are gourmands without parallel. When it comes to gustation, their sensory apparati can detect chemical variation on the order of one part per ten million." The machine paused. The alien dribbled and continued. "In exchange for the tutorials, you will be required to provide the Ghrezshsteklf with five thousand tissue cultures. They desire epidermal samples from representative individuals of your people."

"They want skin?" said Richardson in disbelief. "Why in the world do they want thousands of skin samples?"

"The number is to assure a good variety. They intend to clone the material, creating great spools of it for mass distribution."

"But, why?" stammered Richardson. He glanced around the table at the other U.N. representatives and saw only horror and confusion on their faces. "Why?"

"To ingest it, Misterichardson. They find it quite delicious, and are particularly intrigued with the flavor variation associated with changes in pigmentation. But you need not worry, you'll never see any of it. Naturally my own people have added a rider to the trade agreement, the dust factor you understand. We insist that your epidermis be restricted to your own worlds and those of the Ghrezshsteklf, but I don't see that as any kind of obstacle.

"Now then, Misterichardson, do we have a deal

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## Pidgin

Nathan glanced up at the clock when the alien entered his shop. It was just past noon, too early for aliens. He sighed. It was going to be one of those days.

Within seconds of its arrival, the alien tightly pulled in its viscous blue facial tentacles to create the appearance of a handlebar moustache, a slimy blue moustache at that. It shuffled up to the front of the shop on dozens of tiptoes and came to rest with its elbows on the counter, dropping a foot in height in the process.

"Good day," said the alien in warm rounded tones and a slight New England accent.

"Good day," replied Nathan. He was born and raised in Los Angeles, and so was used to the comings and goings of aliens, at least as much as one can get used to monsters that look like they come from a Lovecraft novel and sound like they come from Harvard.

"I wish to purchase some fruit."

"Fruit?"

"Yes, I should like two apricots, an apple, a bunch of seedless grapes, and a coconut."

"I'm sorry, sir or ma'am, but this is a hardware store. We do not sell fruit."

"Ah, I'm sorry," said the alien. "Perhaps you did not understand me. I will say it again in French. I wish to purchase some fruit. I should like a banana, half a watermelon, an orange, and two nectarines. How much will that be?" One end of its false moustache twitched, and it elongated a tentacle to reach into the folds of its satin robe and bring forth a credit stick.

"Okay, first, that's not French, you're still speaking English. And second, that's not what you asked for the first time. And third, this is *still* a hardware store and you can't get any fruit here."

The alien set the credit stick down on the counter, leaning to one side as it raised up one of its elbows and used its dainty tyrannosaur-like forelimbs to smooth its tentacle back into place.

"This is most distressing," it said. "I had been informed that English was the preferred tongue in this location. But I am well prepared. I have mastered several dozen of your world's languages. I will try again in Arabic. I wish to purchase some fruit. I should like an avocado, three kumquats, a pound of strawberries, and a durian. That's to go."

"Look, pal, I don't know what your problem is, hell, I don't know what your species is, but this ain't a frickin'™ fruit stand. It's a hardware store. And you're not speaking Arabic, you're still talking to me in English. And you still don't know what it is you want fruitwise because you've asked for something completely different once again."

"You are a very, very rude clerk," said the alien. "I think I know when I'm speaking one of your myriad miserable languages, and I would appreciate if you could manage to wait upon me with considerably less attitude. Now you are apparently an extremely dense representative of your planet's allegedly dominant lifeform, so I will try again and speak more slowly in the native Cantonese of your ancestors. I wish to purchase some fruit. I should like a lemon, two grapefruit, some blackberries, and a pear, preferably a Bartlett if you have it."

Nathan fumed. Cantonese speaking ancestors? He was a blonde haired, blue-eyed California native.



What was it thinking? Aliens were just so thickheaded and superior. Sure, many of them were benevolent and shared their technological advances, but this one was dumb as a post.

"Look, you're just not getting it. I sell hardware, okay? Not food. You need some pipe fittings, I'm your man. You want to get some caulking, I've got you covered. Painting supplies? No problem. But it's all hardware, okay? No fruit."

The alien's attempt at a moustache faded as it began twiddling its facial tendrils in a manner suggesting exasperation or the need to find a restroom. "I don't understand why you're being so difficult," it said. "I shall try once more, and this time perhaps I will have more luck with Hindustani. I wish to purchase some fruit"

"Oh!" said Nathan, slapping his palms on the counter. "Hindustani! Of course. Now I understand. Hold on, I have just what you need." He darted out from behind the counter, down one aisle of the store and up another, grabbing several items as he went. When he returned behind the counter he began placing merchandise in front of the alien. "Tell me if I have this right. You want fruit, yes? A cantaloupe, three guavas, a pineapple, and a lime, right?" He pointed to the assortment on the counter, a pipe wrench, three rolls of electrical tape, a dry cell battery, and a small bucket of spackle.

The alien gave off a sudden odor, a not unpleasant combination of smoked meat and burning leaves. "Oh my, yes, that's it exactly. Thank you. Could you bag that up for me? How much do I owe you for the fruit?"

Nathan scanned each item, glanced at the total on his cash register, and moved the decimal point one place to the right. "One hundred twenty-six dollars and forty cents." He picked up the alien's credit stick, jammed one end into his register and pulled it back out. "If you'll just confirm the purchase for me, you'll be all set." He stuffed the merchandise into a small plastic bag, considered the heavy wrench, and double bagged the whole order.

The alien brought the credit stick up to its face, eyed the amount showing on the side in glowing numerals and triggered acceptance of the transaction. Nathan's register made a pinging noise.

"Thank you, you've been most helpful. Please accept my apologies if I seemed a bit tense before. As a visitor here myself, it's easy to forget how many different language communities co-exist in Los Angeles. But be assured, I have several acquaintances whose command of Hindustani is almost as excellent as my own, and I shall encourage them to make all their purchases here. Good day."

With its business complete, the alien turned on its many tippytoes and skittered out the door, clutching its bag of 'fruit.'

"Tourists," said Nathan, and went back to work

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### **About the Author/Artist**

Dr. Lawrence M. Schoen is probably most known as “That Klingon Guy” because of his years of service as the founder and director of the Klingon Language Institute. His doctorate is in psychology, and he spent ten years as a professor of psycholinguistics and cognitive psychology. Nowadays he splits his time between his work as a writer and serving as a research consultant for a Philadelphia mental health and addictions treatment agency. He lives just outside of Philadelphia, PA in a quiet neighborhood that knows little of his eccentricities. His short fiction has appeared in four countries and three languages. He writes every day, yes, even when he's traveling the world promoting Klingon or appearing at your local con. He just finished a novel about the Amazing Conroy, a world-hopping hypnotist turned corporate CEO, and his faithful companion, a buffalo dog named Reggie. You can find out more at his website: [www.klingonguy.com](http://www.klingonguy.com)

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Rachael Mayo is a science-fiction and fantasy illustrator from Kansas City, Missouri. She earned a BFA in illustration from Central Missouri State University, then promptly went to work in the IT field. To her good fortune, she discovered that she liked working with both computers and art. She favors traditional art mediums because she enjoys making messes and sharpening colored pencils. The results of her efforts may be seen in her online art gallery at [elfwood.lysator.liu.se/~rachaelm/](http://elfwood.lysator.liu.se/~rachaelm/).