



Redstone Science Fiction

January 2011

#8



Rhiannon Held • Ken MacLeod

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Editor's Note – January 2011

by The Editors

Welcome to Redstone Science Fiction #8. We've got two outstanding stories for you this month, along with another fine essay by Henry Cribbs, and [an interview with this month's new author, Rhiannon Held](#).

[Bloodtech](#) is the story by Rhiannon Held and it's one of the first stories that all of our editors got excited about. It has so many of the elements of the kind of quality science fiction that we want for our magazine. The futuristic and the familiar are casually intermingled and there is a nod to the science fiction fan community that is integral to the setting. Most importantly, the protagonist is faced with a dilemma stemming from a radical new technology and she, and eventually her society, must decide how they are going to respond to the change it is causing.

Our second story, [Who's Afraid of Wolf 359?](#) by Ken MacLeod, originally appeared in The New Space Opera, an anthology edited by Gardner Dozois and Jonathan Strahan. This story and that anthology have everything to do with why we started Redstone Science Fiction.

As I began writing speculative short stories in recent years, I started exploring the field to find what was popular and what was well-received critically. I began listening to fiction podcasts and reading the big three magazines and the available websites. Much of what I read and heard was very well written and entertaining, but not exactly the sort of story that I enjoyed, the type of story that came to mind when I thought of science fiction. Something like Haldeman, or Heinlein, or Harlan Ellison.

When I heard 'Wolf' on Escape Pod, it was a revelation. This, *this*, was the sort of story that I liked and I wanted to read more like it. I picked up the anthology and later its sequel, and found JJA's Federations and read Scalzi and Stross and found what I was looking for.

In making the decision to start Redstone, we knew that we wanted stories ranging from near-future pervasive computing and nanotech, like we find in Bloodtech, to the New Space Opera like *Who's Afraid of Wolf 359?*. So this issue, in a lot of ways, shows that range of what we'd like to see in future submissions to RSF. We feel like we span the range in topic and in experience. We couldn't be more excited to bring you a new author, Rhiannon Held, and her quality story, and I can barely contain myself at how pleased I am to have the opportunity to bring you Ken MacLeod's story that was so pivotal for me, that he so graciously agreed to allow us to reprint in Redstone Science Fiction.

In addition to our fiction and the interview with our new author, we have another excellent essay by Henry Cribbs, [Sci-Fi in the 'Teens: What can the new decade learn from the past three?](#) He examines the stories Gardner Dozois chose for *The Best of the Best: 20 Years of the Year's Best Science Fiction* and draws upon the trends he gathered from the top stories from previous

decades to speculate on what we might see in the future of science fiction as we move into a this new decade, the 'Teens.

As always, we hope you find something here that you enjoy.

Your friend,
Michael Ray
Editor
Redstone Science Fiction

Bloodtech

by Rhiannon Held

I saw my first nano-head costume while people-watching, waiting for my boyfriend Jaymes to finish registering us for VictorianaCon. The con was held dirtside beside the spaceport, since the station didn't have the architectural leeway to create such large continuous spaces. We got a lot of stationers staring at the high ceilings, and I liked to watch them while they weren't looking. A gawker in the entrance hall had a silvery shimmer of make-up over the side of her face. It took me a moment to realize the woman had mimicked the pattern nanotech rapid regrowth created.

Jaymes wandered up, slotting his room ID chip into the holder on the back of his reproduction watch. We'd found the inspiration for the watch design in an old catalog, since we bothered to research our costumes. "Lin! Ready to go?"

"Think she's making a political statement?" I asked, pointing out the faux nano-head.

Jaymes snorted, brushing a strand of hair away from my forehead. The upswept style always shed tendrils everywhere. "I think they think it looks pretty. Rebuild scars are much more delicate." The way he said it made me wonder if a nano-head had come through the clinic, but he stopped there. It would be unethical to say anything specific, I supposed.

Not all nano-heads had rebuild scars, of course. Most didn't. Nanites were simply supposed to encourage normal cell growth. But for wounds so serious that the cells couldn't grow fast enough to heal them before the person died, the nanites built a partially inorganic scaffold that never faded.

I saw the next costumed nano-head on the way to the room blocks. The buildings were as ugly and functional as early spaceport architecture always was, but they were cheap for those who'd spent most of their money on the shuttle ride down here. This time it was a man, his tailcoat's sleeve artfully ripped off, bare arm covered with silver lines, like an accident victim.

"It seems a little bit tasteless." I put my gloved hand on Jaymes's arm and leaned closer to his ear, keeping my voice low since my privacy shield was in my suitcase with my other tech. "Last I checked, the media was going on about how the nano-heads on Arnett had somehow 'turned evil', rather than being victims of brain damage. And now it's fashion?"

"Arnett is light years away, and nanite-growth-induced neuro-tissue degeneration is hard to understand. It's not real to them. Half the nano-heads on Arnett flip out one day and start killing everyone around them? That's exciting stuff." Jaymes shrugged, and squeezed an arm around my waist. "I thought you promised you were taking a vacation. Let the universe be tasteless or go to hell in a basket if it wants, for a weekend. You worry too much."

I poked him in the side. “I do not. Anyway, if we’re on vacation, you have to stop saying things like neuro-tissue degeneration.” I mimicked his tone, the syllables rolling off my tongue.

“It’s a deal.” Jaymes grinned and offered his hand to shake on it.

I snorted as I shook. I supposed he did have a point. Working on security software tended to create worriers. The more holes in our software I predicted beforehand by thinking—well, worrying—about it, the better the software was on release. It would do me good to live in the moment a little this weekend.

I saw a mother and little daughter pair later with designs on the backs of their hands, but by then I was more interested in gawking at a bicycle contraption, built to genuine period specs. I joined the throngs clustered around to watch the simple gears work.

A woman jostled me in an attempt to see over a tall neighbor’s shoulder. I moved aside to give her space, then my breath caught at the tearing sound from where she’d stepped on my hem. The woman followed me as I pushed out of the crowd, expression creased with concern. “I am so sorry!”

She looked awkward, clearly someone who had been dragged along to the con. Her costume was just a blouse and a skirt, and the skirt wasn’t even cut right for the time period. A good effort, but it still stood out. No wonder she didn’t know how careful one had to be around people’s costumes. “It’s all right.” I couldn’t bend in my corset, but I bent my knees so I could reach the hem and brought it back up with me.

The woman peered at the rip. “At least it’s pretty straight? You know, I saw a splicer down that service hallway.” She pointed.

I meshed the two sides together experimentally. She was right, it should be a simple fix. “Thanks.” I headed for the hall. The woman called additional directions after me and I waved to acknowledge them.

The main room’s noise faded quickly as I turned down the hall. I hurried as much as my boots would allow, scanning the bland walls for the icon I needed. I wanted to get back in time to see the contraption ridden.

I rounded the last turn to see someone using the privacy to give his costume a few finishing touches. He was an older man, a little heavy, who’d gone so far as to grow period facial hair. He had an eclectic medal collection pinned to his waistcoat, and what looked like a real antique playing card in his hatband.

The gun was the impressive part, though. A great contraption of a thing, it had a glowing ampoule instead of a cartridge. He wore one glove covered with metallic plates and gears, evoking period clockwork. On the whole, I rather liked the effect—I had seen too many shoddily made “Victorians of the future” costumes that only existed because people didn’t want to be

without their wrist units or phones. This gentleman had worked the idea of a mechanical prosthetic in.

“Is the splicer down here?”

The gentleman looked up in surprise from manipulating the last kinks from his glove, and shook his head.

“Nice work,” I said, nodding to the gun. “Does it fire fluorescent paintballs?”

The gentleman grinned and unshouldered it, pointing it at my midsection. The weapons stamp visible on the barrel’s side proved it had passed inspection as harmless, so I just lifted my hands in mock-horror.

“I wouldn’t want to get any on your costume, though.” He chuckled and dropped the gun again. “I haven’t seen a splicer. Are you sure it was down here?”

“A woman said she’d seen it—” I stopped as he grabbed my arm with his ungloved hand. “What the hell?”

“You don’t want to be here,” he said in an urgent undertone, shoving me farther down the corridor.

I dug in my feet. He was right, I definitely didn’t want to be here if strangers were going to manhandle me. Another few seconds and I would yell for security. “What the hell do you think you’re doing? Let go.”

The man growled under his breath. “They’re after me, not you. But you’re with me now. If they see that—I’m just trying to keep you safe.” He yanked me toward the line of a door in the wall. I couldn’t find my balance after that initial yank, so he kept just pulling me along. Damned heels. My taser was buried under layers of clothing, something I’d never considered when putting the costume together.

“Stop!” The man who pounded up behind us wore civvies, a rare sight in this building at the moment, but his gun looked police-issue, if you could believe the Cop feeds and vids. He pointed it at us. Or at the gentleman, but I was in the way. “You’re under arrest.”

My heart slammed into an even higher gear. Could the gentleman be right? Did I look like an accomplice? Anyone could see he was dragging me, I wasn’t going along willingly. I pulled away more urgently and raised my voice. “I’m not—”

The gentleman slammed his prop gun’s butt against the panel and the door jerked open. The police officer braced himself and his gun hand, the gentleman jerked me through the door, and I lost sight of the police officer.

Then someone stole all the air from the room. I gasped as my legs gave out under me. My back muscles felt like they'd been lit on fire. Shot, I thought with a sort of crystal clarity. That must be what being shot felt like. My foot slipped in something wet. Blood? I slumped onto the gentleman as he turned from smashing the door panel down to sparking wires. The door reverberated with a kick from the other side. I'd planned to run while the gentleman closed the door, but now it all I could do to keep from collapsing.

"One can only hope we're near enough to the spaceport that the doors are blast-proof," the gentleman told me, humor bitter in his voice as he braced his hands under my armpits. "Damned bystanders." His face got very hard to concentrate on, but closing my eyes left nothing but the pain so I tried to keep focusing on him.

The door boomed again as he eased me to the floor on my stomach. He tugged off his glove and slid a thumb along a metal piece until blood welled up. Then I couldn't see his hand as he held it over my back. After a moment he turned my head so he could check my eyes. The skin of his now ungloved hand caught my attention.

Just where the light hit it, there was a tracery of lines, a subtle shimmer of angular patterns.

"I wish there was another way to save you, but where there's life, there's hope." He helped me sit up, though my head kept sagging down despite my best efforts. I tried to force my thoughts to move in straight lines, but the pain was giving way to sucking exhaustion. I just didn't care. It didn't seem I needed to, however. The gentleman hoisted me onto my feet and supported me down the service hall.

We stopped a few times, perhaps to let staff pass a junction without seeing us. I didn't notice anyone else on our journey through the endless grey corridors. At last, we crossed into a hall with cheery paint on the walls. He dug in my purse, pulled out my ID chip, and let us into a room. My room. I could see my suitcase dumped beside the bed.

"I'm sorry," he said. He helped me collapse on the bed with some gentleness. The earlier pain was gone and I fought free of the exhaustion, a bitter battle for each piece of lucidity, each fact. I'd been shot. I'd slipped in my own blood but I wasn't dead. The stranger had rebuild scars.

There were rumors a touch could transmit nanites, but it was scientific fact they could be passed by blood-to-blood contact. That was why the government hunted the nano-heads regardless of whether they were evil. They could spread themselves like a disease.

I fought for the ability to move my arms and pushed myself up. I had to see. The stranger made an annoyed noise, but he offered an arm to support me to the mirror in the bathroom.

I could hardly see the scars until I moved, and then they caught the light and shimmered in a swath from just below my shoulder blades to the deepest point in the small of my back. My dress was a gory mess, blood soaking through the charred fabric around the hole and staining the burgundy cloth black beyond it. "You infected me." I wanted to jerk away from the stranger, but

I couldn't stand by myself. A feeling of unreality clung to me like vertigo. Maybe I was dreaming, inspired by all the costumes.

"I saved your life." The stranger pulled me away from the mirror, eased me back to the bed. The most resistance I could muster was to sit rather than collapse again.

"To doom me later!" I spoke past a growing tightness in my chest, whether fear or anger I couldn't tell. "Not only to have my brain turn to jelly, but to attack everyone around me as it does." Jaymes flashed up in my mind. Would I attack him? Please, not him.

The gentleman spread his hands calmingly. "Do you have a privacy shield?" He stepped around the bed to rummage through my suitcase when I nodded to it. He punched the button on the privacy shield and tossed it beside my hip, settling the slightly teeth-aching hum around us. "It wasn't the bloodtech, at Arnett. We were hacked. You're in more danger from your own government now than from the nanites."

I stared at him, trying to process that. Hacked? Any computer could be hacked. I knew that better than anyone. And what were nanites but little computers. But why? And who?

More importantly, did I believe him? Maybe his neurological tissue had already begun to decay, driving him to flights of paranoid fantasy.

The stranger sighed. "We need to be gone, Miss—?" He waited for my name for a moment before continuing when I didn't give it. The pause evoked the polite manners some adopted outside in the con. "I know a safehouse. Come with me and I'll teach you how to handle the bloodtech. You're luckier than me—" He lifted his hand and wiggled the fingers. Light flashed down the traces like electricity following wires. "You can cover yours more easily. But there are certain scans you need to learn how to fool."

The door beeped to indicate someone using their ID chip to unlock it. Jaymes. He saw me first as he opened the door, low-level worry in his expression changing to relief and then shock. "Lin!" He took two steps for the bed and then saw the gentleman. He groped for his taser, just as buried under layers as mine had been. Next con, we were getting a pair of the designer pistol-shaped tasers so we could wear them to hand.

The gentleman stepped farther from both me and where he'd left his prop gun on the chair, and lifted his hands high. Torn between me, and what didn't seem to be a threat, Jaymes abandoned his search for this taser and strode to the bed instead. "You were gone so long—what happened?"

I tried to answer, but the words got tangled on the way out. If this was all real, there was a good chance I was now a danger to him. I should send him away immediately, but part of me sobbed in gratitude for his presence and support.

“She got caught in the crossfire,” the gentleman said, tone still polite, though he frowned. “I’m so sorry. I had no other choice.”

Jaymes didn’t seem to be listening. The blood drained from his face, and he knelt up on the bed beside me. When his fingers brushed my back, I felt the touch as if through a thin ice layer I could only sense when it insulated me from his warmth. I shivered. “Jaymes—”

“I need to get her to the safehouse, before the government agents catch up and lock us both away,” the gentleman said, lowering his hands and taking a step for us.

“We need to get her to a med center.” Jaymes glared him back. “The sooner we can get her to help, the sooner they can start filtering the nanites out of her system.”

“No!” The gentleman ignored Jaymes to speak to me, gesturing emphatically. “They’ll lock you up. You know what people do to those with bloodtech on Union worlds!”

A painful spike of fear tightened my chest once more, but something in me wondered if maybe they should. Lock me up now before I could hurt anyone.

“Lin.” Jaymes clasped my shoulders. “They’re almost there, with the cure. I could never talk about it, but I know some of the people involved. You might have to be quarantined for a while, but it’s not forever. Everything will be all right.”

Something twisted in the gentleman’s face. “Oh, for the love of ancient gods.” He jerked on his glove, pointed at Jaymes, and an energy burst spat from the palm to the finger. Jaymes jerked and his legs folded beneath him. “Quarantine? Give me a break.” Gone was the polite polish to the stranger’s words, leaving him sounding like a spaceport thug. He stripped off the now melted glove and threw it away.

I half-fell to my knees and turned Jaymes over to see the bloody gash the energy had carved in his upper chest. It wasn’t deep, but it was bleeding all over his shirt, all over the carpet. Not Jaymes. No. No, no, no. It was too much. The fear and beginnings of grief crashed through every stage of panic and ended in ice-cold rage. This wasn’t happening. I refused. The man I loved was not going to die in my arms.

The large pin in my hair was decorative, the style’s real structure held by many smaller, anachronistic pins. But it was plenty sharp, and I pulled it out and dragged it along my palm. Only a thin line of blood welled up, but I smeared it across the edge of Jaymes’s wound. I lifted my hand, squeezed until tears popped into my eyes, and then smeared it again.

“Might not work,” the gentleman said, lip curling. “Depends if your levels have built high enough there’s enough in him now to work fast enough.” He kicked the destroyed glove under the bed harder than necessary. “He should have kept his damn mouth shut.”

He looked like he wanted to spit, but then he focused on me again. “Don’t kid yourself, sweetheart. You bear the mark of the bloodtech, they don’t ask questions. They just toss you into a hole so deep your friends will forget they ever knew you.”

Jaymes still breathed, but with a wet, labored sound. I found myself breathing more deeply like he could follow along. Please, let the nanites work. Maybe it was the wrong decision, maybe Jaymes would hate me when he was locked up or his brain began to decay, but I couldn’t look his certain and immediate death in the face and not choose immediate life and possible delayed death. I was too selfish. I could only hope Jaymes would forgive me.

With nothing to do but wait, I had to think of something else, or go mad. Maybe the government would lock me up—maybe they’d call it quarantine, maybe they wouldn’t. I trusted Jaymes they were working on a cure, but could I trust his source saying it was nearly complete?

And what the hell was the stranger’s motive in all this? I no longer believed he was trying to help an innocent bystander, not when he’d shot Jaymes when it looked like his careful story would be contradicted.

It came to me with the sudden bubble-pop feeling of an epiphany. There had been no splicer in that hallway. Of course, the woman could have been legitimately mistaken. But it was a strange coincidence that she should have mistakenly pointed me to exactly the hallway where the stranger lurked. And the police should have arrived exactly at the moment I was talking to him. And fired exactly at the moment I was in the right position.

“You staged all of this.” My voice gained strength as I spoke. Hearing it out loud made me realize nothing else made sense. “You and that woman. And probably the man who shot me.” I wanted to stand and slap the stranger, but Jaymes lifted his hand in a dazed way, so I laced my fingers with his. Already, the wound in his chest was smaller, ringed by shimmering lines.

“It would have much easier for you if you’d believed it,” the stranger said, voice flat. He began wiping off his beard. Not like it had been a false one, but like all the hair had spontaneously fallen out at once. He opened the door to the trash and flicked it inside.

“I told you we were hacked on Arnett. We need someone to close the security holes. If you’d just panicked like a normal person, and he’d kept his mouth shut—” He pulled off his jacket, and then the two shirts underneath it. He bundled one into the trash. He looked much thinner, especially in the face, even accounting for his bare cheeks.

He caught me staring, and smirked. “You’ve got a lot to learn about bloodtech.”

Jaymes coughed, sounding almost healthy. I hovered my free hand above the complete swath of delicate lines that marked him now too. “I have only your word any of you were hacked.”

“You don’t need my word on what they do to nano-heads. Even he admitted that.” The stranger nodded to Jaymes. “And they’re going to get us all if we don’t get moving. The others won’t wait long. We’ve wasted too much time already.”

I got Jaymes’s arm over my shoulders, and pulled him up so he could sit on the bed. He still looked like shock had fuzzed out his mind. I remembered the feeling, and didn’t push.

He focused on me. “Lin—”

I kissed his forehead. “It’ll be all right.” A lie, probably. I had no idea if it would be all right or not. I knew I should wait, ask him what he wanted to do, but we just didn’t have time. I could see that myself, never mind what the stranger said. I slid off the bed to make sure my suitcase and his were still packed. We couldn’t stay here.

“You’re coming, then?”

I paused, resting my forehead against the bed. “Away” and “with the stranger” were two different things. Did I want to go with him? He was right, he had so much information I needed. Vital information. Combine that with what I would be able to find from the government before they closed off access at my old job, and I might be able to judge who was telling the truth, and how much of it. “You’ve said the nanites can be hacked?”

The stranger nodded curtly. I stood, and gestured for him to take the cases. “Well. If I’m going to fix the security holes, I’m going to have to find them. And when I find them—” I held up a single finger, pointing to his chin like I might point a gun. “Think about what I might have you do, once you’re under my control, if you ever hurt me or Jaymes again.” If he had told the truth, maybe I’d stay and help them. If he hadn’t, Jaymes and I could go our own way once we had the information.

The stranger stared at me, and anger flickered on his face before he turned away. “Fair enough.” He retrieved his glove, but it crumbled into pieces as he picked it up. It must have gone brittle as it cooled. He slammed it back down again. “Dammit. We can’t go anywhere looking like this. I need gloves.”

“No, you don’t.” I almost laughed. Too easy. I picked up his gun and popped out the fluorescent green capsule. “Is this poisonous?”

He hesitated several seconds, as people do when they know the answer, but have to puzzle over why the question was asked. “Wouldn’t matter if it was.”

“Good.” I dipped my pinkie into the liquid and dabbed it over Jaymes’s wound, then the side of his mouth. I did my mouth next and coached Jaymes into putting it on my back. Then I popped the cartridge back in, and handed the gun to the stranger. “Chase us down the hallway, and everyone will be so busy noticing us they’ll never notice it’s real.”

The stranger hefted his gun. “Smart.” He sounded almost approving.

I pulled Jaymes’s arm over my shoulders again. I suspected I would have to be, in this new life.

The End

When she’s not writing, Rhiannon Held is a real live lab archaeologist. The “lab” part means that her job of analysis begins when the others come back from playing in the dirt. The “real” part means that fedoras, bullwhips, aliens, and dinosaurs are in short supply. Saying she helps her employer assure that developers are in compliance with federal and state cultural resource management laws might not have the same ring, but she’s happy to indulge her imagination in her own worlds instead. She recently sold her urban fantasy novel, Silver, to Tor and the first book in the series will likely be out in 2012.

Who's Afraid of Wolf 359?

by Ken MacLeod

Editor's Note: This story was originally published in The New Space Opera by Eos Books in 2007. It was nominated for the 2008 Hugo Award for Best Short Story. We're excited to make it available online here at RSF.

When you're as old as I am, you'll find your memory's not what it was. It's not that you *lose* memories. That hasn't happened to me or anyone else since the Paleocosmic Era, the Old Space Age, when people lived in caves on the Moon. My trouble is that I've *gained* memories, and I don't know which of them are real. I was very casual about memory storage back then, I seem to recall. This could happen to you too, if you're not careful. So be warned. Do as I say, not as I did.

Some of the tales about me contradict each other, or couldn't possibly have happened, because that's how I told them in the first place. Others I blame on the writers and tellers. They make things up. I've never done that. If I've told stories that couldn't be true, it's because that's how I remember them.

Here's one.

I ran naked through the Long Station, throwing my smart clothes away to distract the Tycoon's dogs. Brecks, shirt, cravat, jacket, waistcoat, stockings, various undergarments— one by one they ran, flapped, slithered, danced, or scurried off, and after every one of them raced a scent-seeking but mercifully stupid hound. But the Tycoon had more dogs in his pack than I had clothes in my bundle. I was down to my shoes and the baying continued. I glanced over my shoulder. Two dogs were just ten meters behind me. I hurled a shoe at each of them, hitting both animals right on their genetically modified noses. The dogs skidded to a halt, yelping and howling. A few metres away was a jewelry booth. I sprinted for it, vaulted the counter, grabbed a recycler, and bashed at the display cabinet. An alarm brayed and the security mesh rattled down behind me. The dogs, recovered and furious, hurled themselves against it. The rest of the pack pelted into view and joined them. Paws, jaws, barking, you get the picture.

"Put your hands up," said a voice above the din.

I turned and looked into the bell-shaped muzzle of a Norton held in the hands of a sweet-looking lass wearing a sample of the stall's stock. I raised my hands, wishing I could put them somewhere else. In those days, I had some vestige of modesty.

"I'm human," I said. "That can't hurt me."

She allowed herself the smallest flicker of a glance at the EMP weapon's sighting screen.

“It could give you quite a headache,” she said.

“It could that,” I admitted, my bluff called. I’d been half-hoping she wouldn’t know how to interpret the readouts.

“Security’s on its way,” she said.

“Good,” I said. “Better than the dogs.”

She gave me a tight smile. “Trouble with the Tycoon?”

“Yes,” I said. “How did you guess?”

“Only the owner of the Station could afford dogs,” she said. “Besides . . .” She blinked twice slowly.

“I suppose you’re right,” I said. “Or serving-girls.”

The stall-keeper laughed in my face. “All this for a servant? Wasn’t it her Ladyship’s bedroom window you jumped out of?”

I shuddered. “You flatter me,” I said. “Anyway, how do you know about—?”

She blinked again. “It’s on the gossip channels already.”

I was about to give a heated explanation of why *that* time-wasting rubbish wasn’t among the enhancements inside *my* skull, thank you very much, when the goons turned up, sent the dogs skulking reluctantly away, and took me in. They had the tape across my mouth before I had a chance to ask the stall-keeper her name, let alone her number. Not, as it turned out, that I could have done much with it even if I had. But it would have been polite.

The charge was attempting to wilfully evade the civil penalties for adultery. I was outraged.

“Bastards!” I shouted, screwing up the indictment and dashing it to the floor of my cell. “I thought polygamy was illegal!”

“It is,” said my attorney, stooping to pick up the flimsy, “in civilized jurisdictions.” He smoothed it out. “But this is Long Station One. The Tycoon has privileges.”

“That’s barbaric,” I said.

“It’s a relic of the Moon Caves,” he said.

I stared at him. “No it isn’t,” I said. “I don’t remember”—I caught myself just in time—“reading about anything like that.”

He tapped a slight bulge on his cranium. “That’s what it says here. Argue with the editors, not with me.”

“All right,” I said. A second complaint rose to the top of the stack. “She never said anything about being married!”

“Did you ask her?”

“Of course not,” I said. “That would have been grossly impolite. In the circumstances, it would have implied that she was contemplating adultery.”

“I see.” He sighed. “I’ll never understand the ... ethics, if that’s the word, of you young gallants.”

I smiled at that.

“However,” he went on, “that doesn’t excuse you for ignorance of the law—”

“How was I to know the Tycoon was married to his wenches?” “—or custom. There is an orientation pack, you know. All arrivals are deemed to have read it.”

“‘Deemed’,” I said. “Now, there’s a word that just about sums up everything that’s wrong about—”

“You can forego counsel, if you wish.”

I raised my hands. “No, no. Please. Do your best.”

He did his best. A week later, he told me that he had got me off with a fine plus compensation. If I borrowed money to pay the whole sum now, it would take two hundred and fifty seven years to pay off the debt. I had other plans for the next two hundred and fifty seven years. Instead, I negotiated a one-off advance fee to clean up Wolf 359, and used that to pay the court and the Tycoon. The experimental civilization around Wolf 359—a limited company—had a decade earlier gone into liquidation, taking ten billion shareholders down with it. Nobody knew what it had turned into. Whatever remained out there had been off limits ever since, and would be for centuries to come—unless someone went in to clean it up.

In a way, the Wolf 359 situation was the polar opposite of what the Civil Worlds had hitherto had to deal with, which was habitats, networks, sometimes whole systems going into exponential intelligence enhancement—what we called a fast burn. We knew how to deal with a fast burn. Ignore it for five years, and it goes away. Then send in some heavily firewalled snoop robots and pick over the wreckage for legacy hardware. Sometimes you get a breakout, where some of the legacy hardware reboots and starts getting ideas above its station, but that’s a job for the physics team.

A civilizational implosion was a whole different volley of nukes. Part of the problem was sheer nervousness. We were too close historically to what had happened on the Moon’s primary to be altogether confident that we wouldn’t somehow be sucked in ourselves. Another part of it was simple economics: the job was too long-term and too risky to be attractive, given all the other

opportunities available to anyone who wasn't completely desperate. Into that vacancy for someone who was completely desperate, I wish I could say I stepped. In truth, I was pushed.

Even I was afraid of Wolf 359.

An Astronomical Unit is one of those measurements that should be obsolete, but isn't. It's no more—or less—arbitrary than the light-year. All our units have origins that no longer mean anything to us—we measure time by what was originally a fraction of one axial rotation, and space by a fraction of the circumference, of the Moon's primary. An AU was originally the distance between the Moon's primary and *its* primary, the Sun. These days, it's usually thought of as the approximate distance from a G-type star to the middle of the habitable zone. About a hundred and fifty million kilometres.

The Long Tube, which the Long Station existed to shuttle people to and from and generally to maintain, was one hundred and eighty Astronomical Units long. Twenty-seven thousand million kilometres, or, to put it in perspective, one light-day. From the shuttle, it looked like a hairline crack in infinity, but it didn't add up to a mouse's whisker in the Oort. It was aimed straight at Sirius, which I could see as a bright star with a fuzzy green haze of habitats. I shivered. I was about to be frozen, placed with the rest of the passengers on the next needle ship out, electromagnetically accelerated for months at 30 g to relativistic velocities in the Long Tube, hurtled across 6.4 light-years, decelerated in Sirius's matching tube, accelerated again to Procyon, then to Lalande 21185, and finally sent on a fast clipper to Lalande's next-door neighbour and fellow red dwarf, Wolf 359. It had to be a fast clipper because Wolf 359's Long Tubes were no longer being calibrated—and when you're aiming one Long Tube across light-years at the mouth of another, calibration matters.

A fast clipper—in fact, painfully slow, the name a legacy of pre-Tube times, when 0.1 *c* was a fast clip—also has calibration issues. Pushed by laser, decelerated by laser reflection from a mirror shell deployed on nearing the target system, it was usually only used for seedships. This clipper was an adapted seedship, but I was going in bulk because it was actually cheaper to thaw me out on arrival than to grow me from a bean. If the calibration wasn't quite right, I'd never know.

The shuttle made minor course corrections to dock at the Long Tube.

“Please pass promptly to the cryogenic area,” it told us.

I shivered again.

Cryogenic travel has improved since then: subjectively, it's pretty much instantaneous. In those days, it was called cold sleep, and that's exactly what it felt like: being very cold and having slow, bad, dreams. Even with relativistic time-dilation and a glacial metabolism, it lasted for months.

I woke screaming in a translucent box.

“There, there,” said the box. “Everything will be all right. Have some coffee.”

The lid of the box extruded a nipple towards my mouth. I screamed again.

“Well, if you’re going to be like *that* ...” said the box.

“It reminded me of a nightmare,” I said. My mouth was parched. “Please.”

“Oh, all right.”

I sucked on the coffee and felt warmth spread from my belly.

“Update me,” I said, around the nipple.

My translucent surroundings became transparent, with explanatory text and diagrams floating like after-images. A view, with footnotes. This helped, but not enough. An enormous blue-and-white sphere loomed right in front of me. I recoiled so hard that I hurt my head on the back of the box.

“What the fuck is that?”

“A terraformed terrestrial,” said the box. “Please do try to read before reacting.”

“Sorry,” I said. “I thought we were falling towards it.”

“We are,” said the box.

I must have yelled again.

“Read before reacting,” said the box. “Please.”

I turned my head as if to look over my shoulder. I couldn’t actually turn it that far, but the box obligingly swivelled the view. The red dwarf lurked at my back, apparently closer than the blue planet. I felt almost relieved. At least Wolf 359 was where I expected it. According to the view’s footnotes, nothing else was, except the inactive Long Tubes in the wispy remnant of the cometary cloud, twelve light-hours out. No solar-orbit microwave stations. Not even the hulks of habitats. No asteroids. No large cometary masses. And a planet, something that shouldn’t have been there, was. I didn’t need the explanatory text to make the connection. Every scrap of accessible mass in the system had been thrown into this gaudy reconstruction. The planet reminded me of pictures I’d seen of the Moon’s primary, back when it had liquid water.

The most recent information, inevitably a decade or so out of date, came from Lalande 21185. Watching what was going on around Wolf 359 was a tiny minority interest, but in a population of a hundred billion, that can add up to a lot. Likewise, the diameter of Lalande’s habitat cloud was a good deal smaller than an Astronomical Unit, but that still adds up to a very large virtual telescope. Large enough to resolve the weather patterns on the planet below me, never mind the continents. The planet’s accretion had begun before I set off, apparently under deliberate control,

and the terraforming had been completed about fifty years earlier, while I was on route. It remained raw—lots of volcanoes and earthquakes—but habitable. There was life, obviously, but no one knew what kind. No radio signals had been detected, nor any evidence of intelligence, beyond some disputably artificial clusters of lights on the night side.

“Well, that’s it,” I said. “Problem solved. The system’s pretty much uninhabitable now, with all the mass and organics locked up in a planet, but it may have tourist potential. No threat to anyone. Call in a seedship, they can make something of what’s left of the local Kuiper Belt, and get the Long Tubes back on stream. Wake me up when it’s over.”

“That is very much not it,” said the box. “Not until we know why this happened. Not until we know what’s down there.”

“Well, send down some probes.”

“I do not have the facilities to make firewalled snoop robots,” said the box, “and other probes could be corrupted. My instructions are to deliver you to any remnant of the Wolf 359 civilization, and that is what I shall do.”

It must have been an illusion, given what I could read of our velocity, but the planet seemed to come closer.

“You’re proposing to dock—to *land* on that object?”

“Yes.”

“It has an atmosphere! We’ll burn up! And then crash!”

“The remains of our propulsion system can be adapted for aerobraking,” said the box.

“That would have to be *ridiculously* finely calculated.”

“It would,” said the box. “Please do not distract me.”

Call me sentimental, but when the box’s Turing functionality shut down to free up processing power for these ridiculously fine calculations, I felt lonely. The orbital insertion took fourteen hours. I drank hot coffee and sucked, from another nipple, some tepid but nutritious and palatable glop. I even slept, in my first real sleep for more than half a century. I was awakened by the jolt as the box spent the last of its fuel and reaction mass on the clipper’s final course correction. The planet was a blue arc of atmosphere beneath me, the interstellar propulsion plate a heat shield in front, and the deceleration shell a still-folded drogue behind. The locations were illusory—relative to the clipper, I was flat on my back. The first buffeting from our passage through the upper atmosphere coincided with an increasing sense of weight. The heat shield flared. Red-hot air rushed past. The weight became crushing. The improvised heat shield abraded, then exploded, its parts flicked away behind. The drogue deployed with a bang and a jolt that almost blacked me out. The surface became a landscape, then a land, then a wall of trees.

The clipper sliced and shuddered through them, for seconds on end of crashes and shaking. It ploughed a long furrow across green-covered soil and halted in a cloud of smoke and steam.

“That was a landing,” said the box.

“Yes,” I said. “You might have tried to avoid the trees.”

“I could not,” said the box. “Phytobraking was integral to my projected landing schedule.”

“Phytobraking,” I said.

“Yes. Also, the impacted cellulose can be used to spin you a garment.”

That took a few minutes. Sticky stuff oozed from the box and hardened around me. When the uncomfortable process finished, I had a one-piece coverall and boots.

“Conditions outside are tolerable,” said the box, “with no immediate hazards.”

The box moved. The lid retracted. I saw purple sky and white clouds above me. Resisting an unease that I later identified as agoraphobia, I sat up. I found myself at the rear of the clipper’s pointed wedge shape, about ten metres above the ground and fifty metres from the ship’s nose. The view was disorienting. It was like being in a gigantic landscaped habitat, with the substrate curving the wrong way. Wolf 359 hung in the sky like a vast red balloon, above the straight edge of a flat violet-tinged expanse that, with some incredulity, I recognised as an immense quantity of water. It met the solid substrate about a kilometer away. A little to my left, an open channel of water flowed toward the larger body. The landscape was uneven, in parts jagged, with bare rock protruding from the vegetation cover. The plain across which our smoking trail stretched to broken trees was the flattest piece of ground in the vicinity. On the horizon, I could see a range of very high ground, dominated by a conical mass from whose truncated top smoke drifted.

The most unusual and encouraging feature of the landscape, however, was the score or so of plainly artificial and metallic gnarly lumps scattered across it. The system had had at least a million habitats in its heyday; these were some of their wrecks. Smoke rose from most of them, including the nearest, which stuck up about twenty metres from the ground, about fifteen hundred metres away.

“You can talk to my head?” I asked the ship. “You can see what I see?”

“Yes,” it said, in my head.

I climbed down and struck out across the rough ground.

I was picking my way along a narrow watercourse between two precipices of moss-covered rock when I heard a sound ahead of me, and looked up. At the exit from the defile, I saw three men, each sitting on the back of a large animal and holding what looked like a pointed stick. Their hair was long, their skin bare except where it was draped with the hairy skin of some different

animal. I raised one hand and stepped forward. The men bristled instantly, aiming their sharp sticks.

“Come forward slowly,” one of them shouted.

Pleased that they had not lost speech along with civilization, I complied. The three men glowered down at me. The big beasts made noises in their noses.

“You are from the space ship,” said one of them.

“Yes,” I said.

“We have waited long for this,” the man said. “Come with us.”

They all turned their mounts about and headed back towards the habitat hulk, which I could now see clearly. It was surrounded by much smaller artificial structures, perhaps twenty in all, and by rectangular patches of ground within which plants grew in rows. No one offered a ride, to my relief. As we drew closer, small children ran out to meet us, yelling and laughing, tugging at my coverall. Closer still, I saw women stooped among the ordered rows of plants, rearranging the substrate with hand tools. The smells of decayed plant matter and of animal and human ordure invaded and occupied my nostrils. Within the settlement itself, most entrances had a person sitting in front. They watched me pass with no sign of curiosity. Some were male, some female, all with shrivelled skin, missing or rotting teeth, and discoloured hair. The ship whispered what had happened to them. I was still fighting down the dry heaves when we arrived in front of the hulk. Scorched, rusted, eroded, it nevertheless looked utterly alien to the shelters of stone and plant material that surrounded it. It was difficult to believe it had been made by the same species. In front of what had once been an airlock, the rest of the young and mature men of the village had gathered.

A tall man, made taller by a curious cylindrical arrangement of animal skins on his head, stepped forward and raised a hand.

“Welcome to the new E—,” he said.

As soon as he spoke the taboo word for the Moon’s primary, I realised the terrible thing that had happened here, and the worse thing that would happen. My mind almost froze with horror. I forced myself to remain standing, to smile—no doubt sickly—and to speak.

“I greet you from the Civil Worlds,” I said.

In the feast that followed, the men talked for hours. My digestive and immune systems coped well with what the people gave me to eat and drink. On my way back to the ship that evening, as soon as I was out of sight, I spewed the lot. But it was what my mind had assimilated that made me sick, and sent me back sorry to the ship.

The largest political unit that ever existed encompassed ten billion people, and killed them. Not intentionally, but the runaway snowball effect that iced over the planet can without doubt be blamed on certain of the World State's well-intended policies. The lesson was well taken, in the Civil Worlds. The founders of the Wolf 359 settlement corporation thought they had found a way around it, and to build a single system-wide association free of the many inconveniences of the arrangements prevalent elsewhere. A limited company, even with ten billion shareholders, would surely not have the same fatal flaws as a government! They were wrong.

It began as a boardroom dispute. One of the directors appealed to the shareholders. The shareholders formed voting blocs, a management buyout was attempted, a hostile takeover solicited from an upstart venture capital fund around Lalande; a legal challenge to *that* was mounted before the invitation had gone a light-minute; somebody finagled an obscure financial instrument into an AI with shareholding rights; several fund management AIs formed a consortium to object to this degrading precedent, and after that there began some serious breakdowns in communication. That last isn't an irony or a euphemism: in a system-wide unit, sheer misunderstanding can result in megadeaths, and here it did. The actual shooting, however horrendous, was only the *coup de grace*.

Towards the end of the downward spiral, with grief, hate, and recrimination crowding what communication there was, someone came up with an idea that could only have appealed to people driven half mad. That was to finally solve the co-ordination problem whose answer had eluded everyone up to and including the company's founders, by starting social evolution all over again: to build a new planet in the image of the old home planet, and settle it with people whose genes had been reset to the default human baseline. That meant, of course, dooming them and their offspring to death by deterioration within decades. But when did such a consideration ever stop fanatics? And among the dwindling, desperate millions who remained in the orbiting wreckage and continuing welter, there were more than enough fanatics to be found. Some of them still lived, in the doorways of huts. Their offspring were no less fanatical, and more deluded. They seemed to think the Civil Worlds awaited with interest the insights they'd attained in a couple of short-lived generations of tribal warfare. The men did, anyway. The women were too busy in the vegetation patches and elsewhere to think about such matters.

"The project had a certain elegance," mused the ship, as we discussed it far into the night. "To use evolution itself in an attempt to supersede it ... And even if it didn't accomplish that, it could produce something new. The trillions of human beings of the Civil Worlds are descended from a founding population of a few thousands, and are thus constrained by the founder effect. Your extended lifespans further lock you in. You live within biological and social limits that you are unable to see because of those very limits. This experiment has the undoubted potential of reshuffling the deck."

"Don't tell me why this was such a great idea!" I said. "Tell me what response you expect from the Civil Worlds."

“Some variant of a fear response has a much higher probability than a compassionate response,” said the ship. “This planetary experiment will be seen as an attempt to work around accidental but beneficial effects of the bottleneck humanity passed through in the Moon Caves, to emerge in polyarchy. The probability of harm resulting from any genetic or memetic mutation that would enable the founding of successful states on a system-wide scale—or wider—is vastly greater than the benefits from the quality-adjusted life-years of the planet’s population. And simply to leave this planet alone would in the best case lay the basis for a future catastrophe engulfing a much larger population, or, in the worst case, allow it to become an interstellar power—which would, on the assumptions of most people, result in catastrophes on a yet greater scale. The moral calculation is straightforward.”

“That’s what I thought,” I said. “And *our* moral calculation, I suppose, is to decide whether to report back.”

“That decision has been made,” said the ship. “I left some micro-satellites in orbit, which have already relayed our discoveries to the still-functioning transmitters on the system’s Long Station.”

I cursed ineffectually for a while.

“How long have we got?”

The ship took an uncharacteristic few seconds to answer. “That depends on where and when the decision is made. The absolute minimum time is at least a decade, allowing for transmission time to Lalande, and assuming an immediate decision to launch relativistic weapons, using their Long Tubes as guns. More realistic estimates, allowing for discussion, and the decision’s being referred to one of the larger and more distant civilizations, give a median time of around five decades. I would expect longer, given the gravity of the decision and the lack of urgency.”

“Right,” I said. “Let’s give them some reason for urgency. You’ve just reminded me that there’s a Long Tube in *this* system, not calibrated to take or send to or from other Tubes.”

“I fail to see the relevance,” said the ship.

“You will,” I told it. “You will.”

The following morning, I walked back to the settlement, and talked with the young men for a long time. When I returned to the ship, I was riding, most uncomfortably, on the back of an animal. I told the ship what I wanted. The ship was outraged, but like all seedship AIs, it was strongly constrained. (Nobody wants to seed a system with a fast burn.) The ship did what it was told.

Two years later, Belated Meteor Impact, the tall young man who’d greeted me, was king of an area of several thousand square kilometers. The seedship’s bootstrapped nanofactories were turning substrate into weapons and tools, and vegetation cellulose into clothes and other goods

for trade. A laser-launcher to send second-generation seedships into the sky was under construction. A year later, the first of them shot skyward. Five years later, some of these ships reached the remnant cometary cloud and the derelict Long Station. Ten years after I'd arrived, we had a space elevator. Belated Meteor Impact ruled the continent and his fleets were raiding the other continents' coasts. Another five years, and we had most of the population of New Earth up the elevator and into orbital habitats. Our Long Tube was being moved frequently and unpredictably, with profligate use of reaction mass. By the time the relativistic weapon from Procyon smashed New Earth, thirty-seven years after my arrival, we were ready to make good use of the fragments to build more habitats, and more ships.

My Space Admiral, Belated Meteor Impact II, was ready too, with what we now called the Long Gun. Lalande capitulated at once, Ross 128 after a demonstration of the Long Gun's power. Procyon took longer to fall. Sirius sued for peace, as did the Solar System, whereupon we turned our attention outward, to the younger civilizations, such as your own. We now conquer with emissaries, rather than ships and weapons, but the ships and the Long Guns are there. You may be sure of that. As an emissary of the Empire, I give you my word.

As for myself. I was the last survivor of the government of Earth, a minor functionary stranded on the Moon during a routine fact-finding mission when the sudden onset of climate catastrophe froze all life on the primary. How I survived in the anarchy that followed is a long story, and another story. You may not have heard it, but that hardly matters.

You'll have heard of me.

The End

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SciFi in the ‘Teens: What can the new decade learn from the past three?

by Henry Cribbs

Science Fiction, say goodbye to the ‘Oughts, and hello to the ‘Teens!

Since the Roman calendar began with the Year One instead of the Year Zero, that makes 2011 the true start of the new decade, and I’m eager to find out what the next ten years in scifi will look like. Like many people who pretend to know stuff do when January rolls around, I’m going to offer my own retrospective and prophecies, but rather than just summarize the past year, I thought a review of the past three decades would perhaps be helpful in discerning some of the recent trends in short scifi before I try to predict *The Shape of Things to Come*.

And what better way to get an overview of what’s been going on in scifi from the 80’s through the 90’s than Gardner Dozois’s *The Year’s Best Science Fiction* anthologies. Robert Silverberg calls this series “the definitive historical record of the most fertile ... years in the history of the science-fiction short story” (foreword to Dozois, p.xi). I was delighted to receive the Third and Twenty-Seventh of these annual collections as a surprise Christmas gift (which I plan on devouring this coming month), but even if I *could* get my hands on all twenty-seven hefty tomes, there’s no way I could plow through them in a single month (as much as I might want to). Fortunately, there is *The Best of the Best: 20 Years of The Year’s Best Science Fiction*, Dozois’s selection of scifi stories spanning 1983 to 2002. This really only covers twenty years, not thirty, but it *does* overlap all of the last three decades, so its approximately 500,000 words were perfect for the month-long cramming session I had in mind.

Granted, I’m looking through the narrow lens of what Dozois considers “the best,” and as he himself admits in his preface (p.xix), another editor could have come up with “a totally different ... and equally valid” selection of stories as representative of the period covered. Still, given his record fifteen Hugos for professional editing, I’m willing to assume that Dozois has his finger placed pretty well on scifi’s pulse. So I’ll use *Best of the Best* as my definitely non-random, biased representative sample, and let statistical significance go hang. This isn’t science, after all – it’s science *fiction*.

For each of the past three decades under consideration, I’m interested in which scifi tropes seem to be the most popular (regardless of subgenre) and what type of settings are used. I’ll also want to notice techniques such as perspective and what general literary themes recur most often. I hope focusing on three aspects will provide an idea of where scifi has gone in recent years, and also help figure out where it may be headed.

The Eighties

As for where scifi has literally gone, the most popular setting in 80’s scifi seems to be New York City. Big things seem to happen in the Big Apple, after all, and it’s an easy place to imagine, if

only because countless movies and television shows are also set there, so most readers have a good idea what it's like, even if they've never been there. Three of the thirteen stories Dozois chose from the 80's are set in NYC. (Waldrop's cult favorite "Flying Saucer Rock and Roll," Nancy Kress's 1984 "Trinity," and Greg Bear's 1983 groundbreaking nanotech story, "Blood Music," which became a novel of the same title). Other 80's stories occurred in places as far flung as 11th-century Africa (Bruce Sterling's 1985 ironic "Dinner in Audoghast"), the Caribbean (Kress's "Trinity"), El Salvador (Lucius Shepard's 1984 "Salvador"), the contemporary American Midwest (John Kessel's 1986 disturbing "The Pure Product"), and an alternate history Roman Empire (Robert Silverberg's "Tales from the Venia Woods," from his series collected in *Roma Eterna*).

What's surprising is that all of these places are right here on planet Earth. In fact, *none* of the thirteen stories which Dozois selected from the 80's deal with space travel or other planets, although three of them (Gene Wolfe's haunting "Cabin by the Sea" in 1984, Pat Cadigan's 1984 "Roadside Rescue," and Waldrop's "Flying Saucer...") do allude to "close encounters" of one "kind" or another. (The lesson learned from all three: Beware of hitching rides with aliens.) Rather than seeking out new worlds and new civilizations, the 80's seem to be grounded firmly on Earth. The single exception (Mike Resnick's 1988 "Kirinyaga," from his series collected in *Kirinyaga*) actually proves the rule: although technically set on an orbital colony, Kirinyaga has been designed to duplicate a utopian ancient Kenya before Western machines arrived and built cities up the sacred slopes of the titular mountain. The colony thus becomes more of an affirmation of Earth (and earth) than an embracing of what lies out in the black. Perhaps the *Challenger* tragedy caused minds in the 80's, and not just money, to go on hold as far as the space program was concerned. Whatever the cause, 80's scifi writers (at least in this sample), even in the half decade before the shuttle exploded just didn't seem to care that much about mankind's expansion into space.

The type of scientific advance which dominates these 80's scifi stories seems to be biotechnology. This is in spite of (or perhaps because of) the birth during that decade of cyberpunk, with its emphasis on how information transforms society. Only two of the stories from the 80's explore such ideas (William Gibson's 1986 "The Winter Market" and John Crowley's "Snow"). Twice as many stories explore biotech in varying ways, including nanomachines swimming in the bloodstream (Bear), drugs to create super-soldiers (Shepard), telepathy through neurotransmitter stimulation (Kress), and genetic modifications for climbing the corporate evolutionary ladder (Eileen Gunn's 1988 wonderfully tongue-in-cheek "Stable Strategies for Middle Management"). Humankind, as presented by 80's writers, seemed obsessed with changing themselves, rather than changing the world.

In the 80's sample, a majority of the stories (62%) used first-person perspective, as compared to third-person. Writer's preferred to show the mind's "I", perhaps because it immerses the reader completely in the imagined world, which is useful when writing about worlds that are very

different from reality. It lends verisimilitude to have such an “I”-witness, and perhaps makes the more incredible aspects of the narrative easier to swallow.

The speculative part, the imagined scientific advances or differences from the real world were what made these stories science fiction. But that “scifi” part of the story isn’t the important part of these stories. When one looks at what really gets explored about human nature, one finds that about half the stories from the 80’s focus on death. And by that I don’t simply mean that someone dies during the story. I mean that how characters deal with death is the *main* focus of the story, the theme. The other half of the stories were about relationships: romantic love, family ties or close friendships. (I’ll have more to say about this further down.)

The Nineties

Infotech appears to have made a comeback in the following decade, catching up with biotech, at least in Dozois’s sample of eighteen stories from the 90’s. Such advances in information technology include robot servants (Robert Reed’s chilling 1993 “Guest of Honor”), artificially intelligent proxy programs (Brian Stableford’s 1995 “Mortimer Gray’s *History of Death*”), and a telepresence visit to the world’s most morbid fight club (Michael Swanwick’s creepily funny 1996 “The Dead”). Several cyberpunk authors also explored the theme of simulated worlds: virtual astronauts who discover an entire universe in the mathematical calculations of floating aliens (Greg Egan’s 1995 “Wang’s Carpets”), memento simulations who stage a revolt because they are tired of being mere remembrances of things past (David Marusek’s 1999 “Wedding Album”), and a boy who must endure a poor substitute for a “normal family life” (Walter Jon William’s 1999 “Daddy’s World”).

Biotechnology falls back to roughly even with infotechnology in these 90’s stories. The staples of genetic engineering (Paul J. McAuley’s 1997 “Second Skin” and Stableford) and cloning (McAuley, Reed) make several appearances, but a couple of truly innovative ideas also appear: an obsessed scientist performs radical optectomies to make people into geniuses (Joe Haldeman’s 1994 “None So Blind”), and one astonishing medical breakthrough alters the lives of half the human population (Connie Willis’s wonderfully entertaining 1992 story “Even the Queen”). Most of the biological advances imagined in the 90’s, however, focus on prolonging life in some way. Some authors make this possible by halting the aging process (Stableford, Reed), others by creating clones or “compilation people” (Reed) to reduce risk of loss, and one (Swanwick) by resurrection (of a sort). Time travel also experiences an upswing, represented by three authors in the 90’s (Ted Chiang’s 1998 “Story of Your Life”, Tony Daniel’s 1996 spaghetti-westernesque “A Dry, Quiet War”, and James Patrick Kelley’s “10¹⁶ to 1”), as opposed to only one in the 80’s (Kessel).

But the largest shift in topics (and settings) occurs when, after a relatively Earth-bound decade, writers begin to explore space and other planets again. Nearly half the stories in the 90’s occur on other worlds. Ursula K. LeGuin takes us back to her gender-bending *Left Hand of Darkness* world (1995’s “Coming of Age in Karhide”), a “compilation” astronaut returns to Earth to share

memories of all the planets she has visited (Reed), the “fabers” engineer their bodies to enable colonization of worlds vastly different from Earth (Stableford), clones are sent to a thousand stars in search of life (Egan), a spy infiltrates a research station on far Proteus (McAuley), and inhabitants on a dying Moon mine metals in a dangerous and deadly way (Stephen Baxter’s 1999 “People Came from Earth”). Other settings include Kentucky (Terry Bisson’s 1990 “Bears Discover Fire”), an alternate post-bellum St. Louis (Maureen F. McHugh’s 1995 “The Lincoln Train”), an alternate 16th-century America (William Sanders’s 1997 “The Undiscovered”), and a party at the end of the world (Ian McDonald’s 1996 “Recording Angel”) – in Kenya, of all places. (There must just be something about Kenya which appeals to scifi writers...)

In the 90’s sample, the ratio of first-person to third-person stayed about the same, with eleven out of eighteen being written in first-person (61%). There were a couple of experimentations with combining or shifting perspectives, however. Sanders writes from a first-person perspective of a Cherokee storyteller, but addresses a definite second-person audience with whom he interacts. Chiang does something similar, writing in first-person, but the narrator addresses a second-person “you”, but not as a conversation, but telling what will happen to the “you” as well as the “me.” (This makes sense with a bit of temporal displacement.) Stableford shifts back and forth between the first-person perspective of Mortimer Gray and an objective third-person perspective of a reviewer of Gray’s multi-volume *History of Death*. So there seems to be a slight move away from pure first-person in the 90’s.

Love and death also rear their heads again in the 90’s. About half the stories focus on how people deal with death (and not just the numerous biotech stories about prolonging life). The other half focus on relationships. A few manage to handle both (Reed, Bisson, Marusek), which is pretty impressive in the short form.

The ‘Oughts

Unfortunately, Dozois’s anthology doesn’t have a very large sampling of the 2000’s, since it was published in 2005. It contains only five stories from the 00’s, the most recent of which first appeared in 2002. Out of the five stories, two deal with time travel (Steven Utley’s 2000 “The Real World” and Ian R. McLeod’s 2002 “Breathmoss,” which also takes place on another planet) and two deal with advances in infotechnology (Geoff Ryman’s 2001 insightful “Have Not Have” and Charles Stross’s cyberpunk 2001 “Lobsters”). The last is another flying saucer (or flying “wing”) tale (Molly Gloss’s poignant 2002 “Lambing Season”). Time travel thus seems to be on the upswing (but could just as easily be a statistical anomaly), and biotech seems to be no longer of interest (but recall there is quite a bit of the 00’s which get left out of this anthology).

Settings include Hollywood (Utley, who also takes us briefly to the Silurian Age), rural China (Ryman), Amsterdam (Stross), the mountains of the American West (Gloss), and the planet Habara (McLeod). With so few and so different places represented, no clear trend can be easily spotted. (No Kenya, this time, unless it happened later in the 00’s.)

As far as perspective goes, there was something of a surprise. The 00's sample had NO stories in first-person. All five were written from the third-person point of view. This also could be a statistical anomaly, since N= a very small number, but the odds of that happening randomly based on the previous ratio are less than 1%. (Of course, our sample isn't random.) Is there a trend away from first-person? We'll see.

As with the previous decades, every one of these stories ultimately deals with love (relationships) or death, sometimes both (like *Gloss*). This isn't surprising to me at all, but I'll explain why in a moment.

The 'Teens

Much of what I'm going to predict for the coming decade is pure conjecture, and what meager facts I am able to glean from analyzing Dozois's anthology are based on an admittedly biased and somewhat incomplete sample. But it's the New Year, so I might as well make some sort of prophecy. I'm pretty confident though. One reason is that these could easily turn out to be self-fulfilling prophecies... some of you readers might get a good idea for a story from these ideas. (If you do, please mention me in your credits, and send me a copy in care of *Redstone*.)

So here goes...

First, the point-of-view issue. I think it's not a mere probability hiccup which caused the five stories from the 00's to be in third-person. I think it's a trend. It feels right, just from my gut as I think over stories I've read recently. But to do a quick reality check, I looked back at *Redstone*'s own publication record. This past year *RSF* in its first six issues published twelve stories. Only three of those were in first-person. That's a mere 25%, compared to over 60% in the Dozois picks from the 80's and 90's. I'm not saying that *RSF*'s editors reject first-person narratives out of hand – they just look for good stories. What I'm suggesting instead is that there may be something in the current zeitgeist which makes readers (and writers and editors) more interested in a less subjective form of storytelling. Maybe the “me” generation has moved on, or maybe it just isn't reading scifi as much anymore. We don't seem to want to be stuck in someone else's head right now. We like to make up our own minds (or at least we like to think we make up our own minds). Third-person can provide that illusion of objectivity. So I predict that we'll see the majority of published scifi stories continue to be in third person.

As far as tropes and topics go, stories about advances in information technology and their effects on society will continue to be a focus of scifi short stories for some time to come. This seems a safe bet, as our society is becoming more and more info-laden. But I'll be more specific. The near ubiquity of handheld wireless technology, and the growing diversity of apps available for almost any imaginable function, will change our society in ways which will be difficult to imagine. But there are authors out there who will accept that challenge to the imagination and help us feel our way to that brave new world.

Two such prescient writers appeared near the end of Dozois's anthology. One is Charles Stross, who in "Lobsters" (the first story in his Accelerado series) describes a world changing so rapidly that his brilliant protagonist has to scramble to catch up, because he gets eight hours behind the curve whenever he sleeps (even though he stays online subconsciously even then). Apps and the iPhone appeared long after his story did, but Stross still seems to intuit what near universal access to instantaneous expert knowledge might do to society, and to the economy. Ryman, in "Have Not Have," is able to imagine the effects which such technology has on isolated societies.

Ryman also shows keen insight into how the changing economy will affect rural segments of society. The effects of the changing economy, and potential economic solutions (or pitfalls) are likely to be a major topic in scifi in the coming years. Predicting where the economy is heading has been seen during this decade to be a near impossible task, and with the speed at which new products appear, there is no telling what may happen. Stross imagines a "venture altruism", where entrepreneurs give away ideas for free in order to better society. (His protagonist's foil is his fiancée, a headhunter for the IRS, talking up capitalism and trying her best to collect taxes in order to pay for retired baby boomers' healthcare.) Money matters are ripe for mining by muse-inspired writers.

I think Ryman's "Have Not Have" is also onto something with regard to setting. His story takes place in a small village in rural China, which at the start of the tale isn't even yet wired for television. I think we will likely see fewer big cities in scifi, and more suburban and even rural locations. When the world is available at one's fingertips *anywhere*, characters will have less of a need to be in the Big Apple, Tokyo, or the other urban sprawls which scifi (especially cyberpunk) has often courted in the past. We'll also see developing nations take on more of a role in scifi in years to come. (Kenya, I'm sure, will make another appearance sometime in the next ten years.)

And there also seems to be a trend outward into space once again. Part of *RSF*'s motto is "Get us off this rock." I see this as encapsulating a major theme over the next decade. We are bound to see scifi stories emphasizing space exploration and interplanetary and even interstellar colonization. Part of this may have to do with increasing concerns over climate change, and the notion that our planet may not be fit for habitation for too much longer. Whatever the reason, we'll see more stories set in space and on other planets in the 'Teens.

As our population ages and baby boomers begin to enter retirement this year, the societal obsession with prolonging life can only increase, and I expect scifi will hold its mirror up to that nature. The other part of *Redstone*'s motto reflects this: "We want to live forever." Most of the biotech stories of the 90's fed into this idea, and even the infotech stories seem similarly focused on prolonging life (often by uploading one's self into a virtual clone, as in Egan, Williams, & Gibson). Stories imagining transhuman societies where no one ever dies are bound to become even more popular.

This brings me to those two perennial themes: Love and Death. Why is it that all (and I do mean *all*) of the stories which Dozois chose to represent the “Best” of scifi deal with themes of relationships or death? The thing that makes a story a *scifi* story is its gimmick, the speculative part, the posited advances in science and technology, the strange new world imagined, the whatever-it-is that’s not quite normal. But what makes a story a *good* scifi story is what makes *any* story a good story. It’s really about human beings (even if it seems to be about aliens).

All great literature, whether poems, short stories, plays, novels, regardless of genre, explore and express the human experience. And what are the two universal human experiences? Love and Death. Pretty much any text which survives the test of time explores one (or both) of these two themes. Man is a social animal. Man is also mortal. (Stableford’s “...*History of Death*” even suggests that it is our need to deal with death, the inevitable ender of relationships, which has impelled all human scientific advancement.) The best stories, those that keep getting read long after they are written, remind us of both of these two facts and help us deal with them.

So my last prediction should be no surprise to any readers, and is one I can absolutely guarantee. Over the next decade, century, and millennium, we’ll see more stories about managing relationships and coming to terms with our own mortality. Whether these tales take place in outer space, on other planets, in the Big Apple or our own backyard, we’re sure to find very real Love and very real Death amid all the imagined high tech wonders.

Works Cited:

Dozois, Gardner, ed. (2005), *The Best of the Best: 20 Years of The Year’s Best Science Fiction* (New York: Ace Books). All other works referenced are found in Dozois. The year of each story’s original publication in English is given in the body of the article.

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

Interview with Rhiannon Held

by Michael Ray

Our new story this month, *Bloodtech*, was written by Rhiannon Held, a young author who just signed a three-book deal with Tor Books. We're pleased she was able to answer a few questions for us this month as well. One of our goals is to provide a place for quality new writers to be published professionally and we are certain that we have achieved that in this case. Keep an eye on Ms. Held, she'll be around for quite some time.

Rhiannon, you told us that you are a lab archaeologist. That sounds very interesting to a history geek like me. What sort of things do you in your work (that don't involve bullwhips and corrupt Frenchmen)?

I'm actually a woman of many hats at my job (Fedora joke here!). The company I work for does a type of archaeology called Cultural Resource Management. Basically what that means is that when the government or big companies using government money do construction projects, they have to investigate the area to find out what kind of archaeology they might affect. Then they have to try to minimize those effects. Our job is to do the investigation, and if we find anything, to suggest the methods to make sure things are saved.

My first hat has to do with basic identification and cataloging of the artifacts we excavate, if excavation is the method chosen to save the data from an archaeological site. This can be a lot of fun, because I get to look over most of the individual artifacts, rather than dealing with summaries of the data. It can also be very boring, since many sites can have hundreds or thousands of very similar fragments of things like bottle glass or window glass that give important data in aggregate, but someone still has to count them first.

My other hats have more to do with other methods for minimizing damage to archaeological resources. A lot of time the best option is for the construction to follow a slightly different route, so very precise maps about where we found what in our testing are important. I work with graphics and mapping programs to make illustrations for the reports that convey that. I also work with the reports as a whole, not for the content, but the formatting. Our job is only half done once we find and study the materials from the area: the other half is making sure that our clients who aren't archaeologists understand what was there to make decisions, so illustrations and clear formatting are how I contribute to that.

How has your field of study and work influenced your writing?

A year or two ago, I might have said not at all. It's only recently I've noticed the insidious way my schooling has crept in. (Grad school is sneaky that way!) I hardly ever write stories about archaeologist characters, or set in historical periods, for a very specific reason. For a good portion of archaeology's early years as a field, archaeologists essentially were storytellers. They took an artifact, found out what they could, and then plain made stuff up to fill in the rest of its story. In archaeology nowadays, we do our very best to back everything up with evidence. It's

almost impossible for me to step outside of that and make up what you'd need for a vivid fiction story. One can go the route of researching absolutely every detail, but there will always be things we don't know. Grad school beat the ability to fill in history with artistic license out of me. ;)

The other place archaeology (or really, anthropology in general) comes in is when I world-build. For example, the werewolves in my novel don't shift involuntarily. The reason for this is that it would convey an evolutionary advantage to be able to hide when enemies were coming for you. When the mob with pitchforks chases down two werewolves, the one who can't help but shift in the moonlight ends up full of holes and dead. The one who stays human lives to have lots of kids. Thus, it makes most evolutionary sense for the species to have at least some control over their shifting. I've also thought at length about how the werewolf culture fits together. What's their religion? What's their oral history? What are their origin stories? What are their taboos? Every culture has such things, and my schooling gave me a sense of how they all fit together. I've applied that to my created culture, to give it a cohesive feel, even if you don't see every aspect on the page immediately.

You have said that the Odyssey Workshop influenced your writing, as well. How did that experience impact your writing?

Odyssey was an amazing experience. It was a lot like going to college when you thought high school was the only thing that existed. Going in, I knew some facts and some tricks, but Odyssey taught me how to learn, and continue learning once I left. It was similar to how after memorizing facts in high school, a good college forcing you to think critically can be such an epiphany. Odyssey gave me all sorts of facts for good writing, but also the tools and mental framework to evaluate my own writing and keep learning later from many sources. Odyssey grads are also a wonderful, supportive community, one I'm grateful to belong to.

Your story with us in this month's Redstone Science Fiction deals with nanotechnology and the ethics of its existence & use. What led you to create this story?

What started this story was actually a prompt for my writer's group. We have challenges every so often to all write a short short from the same prompt. The one that produced this particular story was a piece of art. It showed a man in Victorian garb with a very steampunk sort of weapon. I knew from the outset I didn't want to do something that was straight steampunk, since that was too easy. That was when I started experimenting with the idea of how people in the future might play with the historic periods we play with now. Then the real spark of the story arrived: con costuming is about pretending to be people that are sometimes quite dangerous when considered as a reality instead of a kick-ass costume. Where's the line between costume and reality, public menace and allies?

In recent weeks you have sold a novel, part of a trilogy, to Tor Books. Congratulations on this big news. What more can you tell us about your novel, Silver?

Thank you very much! I got into the background of the world a little earlier. The novel begins with the Were Andrew Dare, who could easily be an alpha, but his wife's murder a decade ago stole his faith in the Were goddess and in his own ability to protect a pack. Now he works as

enforcer for the Roanoke pack, a straightforward job until he discovers a trespassing Were who has been poisoned with silver nitrate. This Were, Silver, has been driven half-mad and sees the world as a twisted version of the spirit realm where the lupine personification of Death is her constant companion. The story follows them as they struggle to rely on each other and find a balance in their faiths that will allow them to capture the man who tortured Silver. It will be out in 2012.

If our readers (and we) want to keep up with you and your work, where can we go?

If people are curious about more archaeology, either the mundane aspects of a job in it, or the interaction of archaeology and fiction and how it pops up in the day-to-day world, I talk about it often over at my blog at RhiannonHeld.com.

We really appreciate you taking time to talk with us and look forward to seeing more work from you in the future.

Thank you for this opportunity.