PIPES

Robert Reed

A relatively new writer, Robert Reed is a frequent contributor to *The Magazine of Fantasy and Science Fiction*, and has also sold stories to Universe, New *Destinies, Isaac Asimov's Science Fiction Magazine, Synergy*, and elsewhere. His books include the novels *The Leeshore, The Hormone Jungle*, and *Down the Bright Way*. His most recent novel is the well-received *The Remarkables*. He is currently working on two new novels, *Cul-de-Sac* and An *Exaltation of Larks*. His story "The Utility Man" was on last year's Final Hugo Ballot, and I doubt that he is going to be a stranger to the award ballots in years to come, either. He lives in Lincoln, Nebraska.

In the quietly compelling story that follows, he shows us that even the most elaborate and well-worked-out plans may fail if they don't take into account one very important factor—the people who have to fit *into* them.

I was living south of campus, upstairs in one of those big old houses cut up into apartments of impractical sizes and shapes. The neighborhood itself was halfway gone—empty lots and shaggy grass, deer in the night and the old people with their pensions and their inertia. The university was planning to move next year. To Omaha. At least there was industry in Omaha, and a stable population, and I was promised a permanent position if I could make my work sing. *Sing*. That's how the project head said it. "Make it sing, Aaron," he told me. "You're the final filter. My editor. The one who puts the pieces into a harmonious whole." He was a charming and gracious asshole, and he rode me about deadlines and the needs of the government. Which is why I worked at home, avoiding his pointed smiles and pestering questions. In order to get the miracles done.

I was putting in eighteen- and twenty-hour days. Sometimes all-hour days. The work involved some of the largest, fastest computing power in the Midwest, yet still it needed me to baby-sit. To sit and watch the essentials on the linkup screen, keeping alert with synthetic coffee and an assortment of pills. Doing all sorts of hell to my moods.

This is about moods.

One night, late, I wandered out into the kitchen and started cooking. Everything was ancient, half the appliances broken and the rest sputtering along. I started cleaning pots and killing the roaches as I found them. I let the tap water run, and the drain drained for a little while, then it quit. So I rooted under the sink and found a bottle of drain cleaner. The liquid was minty and blue, and the label said, "Poison," aloud. "Poison, poison." I poured in twice the suggested dosage and felt the curling pipe turn too hot to touch. Yet nothing was draining. Not even after I finished dinner. Well, I thought, what a bitch. I went downstairs and wrestled my bike out the door and rode to the nearest store. One of those little automated shops that were big twenty years ago. I could smell fresh smoke in the wind. Somewhere west of town, the prairie was burning itself black, and twice I saw deer in the street, their eyes bobbing in my headlight. At the store I bought a can of pressurized, perfumed air-blasting the pipe clear fit my mood. Then I rode home and bailed out the sink, dumping the dirty water down my toilet, and I emptied the can into the drain. Bang, bang, bang. Nothing happened. The pipes rattled, sure, and the house seemed to shake. But that was all. The blockage was out of my reach, and I didn't have any choice but to call a random plumber–Whiteeagle Plumbing—and leave a message on his service.

Then I worked all night.

My high browsers were giving me trouble. And my sabertooths. The individual models built by the respective gene teams were full of hopeful projections and guesswork. Five and six generations into the simulation, and there were inadequate populations of camels and many too many sabertooths. Plus, the savanna itself—a strikingly African landscape of scattered trees and low grasses—was beginning to change. Ashes and oaks took the wrong shapes without being browsed. They were top-heavy, storms knocking them flat too often, and the wrong sorts of grasses were taking root and spreading. Ten generations later, and the sabertooths were causing a massive megafauna die-off. Camels were extinct—phantom bones on the imaginary ground—and the mammoths and horses and ground sloths were heading in much the same direction.

How could it be? I wondered.

What the hell is going on?

It took me the night just to rework the camels. Not their actual genetics, no. Those were for the gene team. I concentrated on the basics. Birth weights. Parental care. Half a hundred little factors, and of course I

didn't know if it would work. Or if I was disrupting still other factors and facets. All I could do was guess, then wait for the next run to see how my luck was running.

It was nearly nine o'clock when I finally punched up the sabertooth data. Nothing seemed obvious, at least at first glance. Something subtle? Something behavioral, maybe? I had the computers select a hundred successful hunts at random, and the linkup screen played each one at triple speed. What was that? I saw the big, muscular cats slipping through the grass and underbrush, stalking any and every piece of game in the area. Nothing was safe on the savanna. Even the adult mammoths, cagey and vast, were being killed. Two cats, working together, managed to panic the mammoths and drive them over a river bluff... and it didn't take me any neural readouts to see the cats loved it. The butchering on a vast scale... it was a game to them. A diversion. What the hell was this? I wondered. What was going on?

I got into the brain dimensions of the cats—reasonable—then into the neurological densities—very unreasonable!—and I beat on the table with a fist, screaming to myself. What were these fucking cat-people doing? Goddamn them and goddamn their mothers! Human beings didn't have those densities. Would you look? How could I work with genius cats? All that spare brainpower, and, out of sheer boredom, the things were killing off the megafauna. For the fun of it. Hunting instincts coupled with a staggering cleverness led to sociopathic sabertooths... "Would you just look at this mess... !"

There came a knocking sound.

I didn't notice it at first. I was draining my coffee mug while hunting for the little red pills that gave me wings and clear thinking. Then again someone was knocking. It sounded as if they were using a tire iron on my apartment door. Who was it?

I stumbled into the living room, a little numb and stupid. For a minute I just stared at the door while it jumped in its frame, and I squinted, thinking it was the project head coming for a status report. Coming to remind me that our proposal had to be in at such-and-such time. The bastard.

I managed to clear my throat and find my voice, saying, "Yeah?"

Someone shouted something about pipes. Was I the guy with pipe troubles?

I seemed to recall details from another life. Not my own. I opened the door and saw a short, massive man standing in the narrow hallway. He

was dark like something left in the sun, and he was smiling. He had a round face pitted by some childhood infection, and his hair was long and black and rather oily. I could smell his breath. It was early in the morning, and his breakfast had been beer. A full-blooded member of some tribe or another, and I hadn't seen his like since my fieldwork in the Badlands.

His name was sewn on the pocket of his work shirt.

Johnny Whiteeagle.

"Hey, you don't look so good," he told me. Smiling. He had a big, effortless smile. "You're not feeling good, mister?"

"I've been better," I allowed.

"Maybe it's your plumbing. Ever think about that?" He let out a big laugh, shaking his head as if he were wickedly clever. "Anyway, you going to let me inside? Or what?"

"What for?"

"Your pipes, mister. Remember?"

I backed away. Pipes? Oh sure... that's right. "All right," I told him. "Come on."

He rattled when he walked. He wore an old leather belt heavy with tools and a portable battery, and the red-rimmed eyes took in the room with a glance. "In the kitchen?" He went straight to the sink and touched the drain with one hand, then the other, always gentle and professional. He was the picture of poise and ceremony, and it was kind of funny to watch. I saw him kneel and look at the curling pipe below, touching it in the same way while saying, "Would you look. They're metal. Antiques, practically." And he gave a satisfied nod. "You know something, mister? This is one fine old house you've got here."

I could smell facsimile peas rotting in the pipes, and grease from last night's cultured hamburger. Yeah, I thought, it's a splendid dear old place. But when are you getting to work?

He asked what had happened. Had I tried fixing it myself?

I kept the epic brief. I tried to seem pressed for time.

"This is old plumbing, mister. If you want it to last," he warned, "you've got to baby it."

"All it is is plugged."

"Oh sure." He stood. He was massive and slow and fat, and when he moved, he breathed hard and wheezed. "Where's the bathroom?" he

asked. "Around back here?"

He wanted to pee away his beer, I guessed. I looked at my watch and said, "That's right—"

"See, because the plug is way below us. I bet so. Has your bathtub been draining slow?"

"I've got a shower—"

"Has it?"

I couldn't remember.

"I bet so." He started toward the bathroom, rattling and wheezing. I considered going back to work and leaving him with his work, only I didn't. I couldn't. I didn't know him, and he was drunk, at least a little bit, and I had funny feelings because he was... well, who he was. A Native and all. Not that I'm a racist, of course. But I learned in the Badlands that these people have odd ideas about property, their culture so damned communal. And besides, I'd have to concentrate like a maniac just to keep him out of my thoughts. I wouldn't get shit done until he was gone. So I was his shadow. I watched him stand in the middle of the bathroom, turning and turning. He asked me, "What? Was this a bedroom once?" He said, "It looks like a bedroom. Am I right?"

"I don't know."

"Look at how big it is!"

I nodded and said nothing.

"Hell," he said, "it's a hike from the shower to the john. Isn't it?" He laughed and got his bearings and walked into the back corner. There was a simple closet built against the kitchen's wall. I kept old boxes and whatnot inside it. He pulled open its curtain and asked, "Can I move the stuff—?"

I started to say, "Sure."

Boxes were tumbling to the floor. Then he bent and started tapping his stubby fingernails on the enormous black pipe that I'd probably seen a thousand times. It was a vertical pipe and smooth, and he laid both hands on the angling joint with a screwed-in cap. "It's as good as done," he promised. "This is the place. It won't take any time at all—"

Everything takes time. I wanted to tell him that universal truth.

"Here." He produced an enormous monkey wrench and fastened it to the cap, its motor humming, and him helping the motor by jerking the wrench with all of his weight. Sweat broke out on his bare arms and forehead, and he gave a funny look while saying, "Help me," through his teeth. Talking to the Great Spirit, I suppose. Years of rust resisted the pressures. Then there was a *pop* and a creaking sound, threads moving against threads. "Yeah!" he squealed. And when the cap was undone, he placed it upside down on one of the boxes, then leaned against the kitchen's wall to pant.

I watched him.

"Yeah," he said, "I've worked everywhere in this town. For years. I used to work on the governor's pipes and inside the government buildings." He pulled a mechanical spider from a sealed pouch. It was old but still shiny, a cord sprouting from its back, and him plugging the cord's free end into the battery riding on his hip. "Inside houses here and everywhere. I know this town from its pipes. Let me tell you—"

"Yeah?"

"Mansions and trailers and everything between." J waited.

He asked, "What about you? What do you do?"

"School."

"You in it or teach it?"

"No, work for the university," I explained. "See, I'm real busy with this project—"

"It's leaving soon, isn't it? The professors and everything?"

"That's better than staying," I replied. How long had it been since I'd talked to another person? I couldn't remember. Days, at least, and I couldn't help but say, "Once the farms collapsed, everything started to slide. To die. Nobody wants to live here anymore."

"Don't I know it," he told me. "Just like you say, mister. It's all sliding. I've seen it happening since way back when."

Then I said, "Not that it's all bad. Of course."

He looked at me, his smile changing.

Did I say something wrong? I wondered.

"No." He told me, "You're right," and showed his yellow teeth. "I was thinking that just the other night. Telling my wife it was something watching all you folks heading out of here." He touched a hidden switch on the spider's back. The shiny long legs began to move, kicking and curling, and I nearly could smell the power in them. I nearly could feel their cutting tips slicing at the air. "There you go." He was talking to the spider. He put it down the opened pipe and turned to me again, saying, "Yeah, I think it's great to see. I mean, this country wasn't meant to be corn and more corn, and I don't miss it."

The farms began crumbling when the cheap ocean farms were formed off every coast. It was twenty years ago, and the deathblow came when the gene teams found ways to grow steaks and pork chops with natural gas and water. Better living through chemistry, and all that.

"You smell the fires last night?" he asked.

I said, "No," because I'd forgotten them. Then I remembered my ride to the store and smelling the grass burning. Sure.

"I smelled them. It was like old times for me." And he laughed. The spider had been crawling down into the pipe for a minute now. I could hear its feet on the metal, then it stopped at the plug and started to cut. I presumed. The cord lay in Johnny Whiteeagle's hand, and he smiled at me and said, "The fires made me think of the reservation. When I was a kid, even younger than you." As if I were nine years old or something.

"The reservation?" I said.

"I'm Lakota," he informed me. His free hand pointed at his considerable body, and he said, "Sioux to you."

"I know," I managed. "Sure." A bad bunch of fellows, I was thinking. We had never completely beaten them. Sitting Bull and Crazy Horse weren't the end of them. When I was a kid, I remembered, they started a little war up in South Dakota. Some snipers, some bombers. A low-grade war, and I had to wonder about my plumber. Maybe he was an old terrorist. It made me stop and think, I can tell you.

A couple of moments passed.

My companion gave a little nod, then asked, "So what do you do for the university? What's this job?"

I tried explaining. "All this empty country? Cheap and going to waste?" I said, "I'm helping the university make a proposal. It's something nobody's tried before. We want to use genetic engineering and ecological planning—"

"Yeah, I've heard about you. Sure thing!" He was laughing and shaking his head. "Hey, this is great! I mean it! You guys... you're the ones trying to put everything back together... aren't you? I heard about you the other night, on television—"

"I'm helping with the proposal," I said. "We need funding over a lot of

decades... if this is going to work at all..."

"It's going to work fine. I've got a feeling." He grinned and told me, "That's so damned neat. I mean it, mister."

I shrugged and smiled. Who was I to ignore praise?

"I'm Johnny Whiteeagle." His free hand shot out, moist and squeezing my hand. "I told my old lady just this morning—I mean this—that something big was going to happen today. I had a feeling." He laughed. He filled my oversized bathroom with sound, then he slapped me on the shoulder. "So what's your name, mister?"

"Aaron."

"Well, Aaron, this is swell."

It was nice to hear. It was nice just to stand there with him and have nothing to do but believe him.

Johnny Whiteeagle bent toward the pipe and listened for a moment. "Sounds done." Then he started retrieving the spider, hand-over-handing the cord while asking me, "What do you do? Work here? At home?"

"Yeah-"

"You've got a computer or something?"

"I'm plugged into the university. Right now, in fact." I nodded and gave my watch a meaningful glance. Assuming I could make changes in the sabertooths before noon, how long until I could run a good twenty-plus-generation simulation?

The spider came out of the pipe. It was covered with the blackest goo I'd ever seen, foul like very old garbage, and Johnny unplugged the cord from the battery and asked, "Can I rinse this clean?" He was already walking, some of the goo dripping to the floor. He dropped the spider into the sink and ran the hottest water, steam in his face and him asking me, "So what're you going to do to the land? How are you going to pull it back to where it started?"

"We can't. Not after everything." Generations of cultivation and road building and dam building and people. People and more people, I explained, and there were all sorts of problems.

"Oh sure." He had an optimistic stance, legs apart and the scalding water cooking the spider clean. He added soap. He stirred the suds with the handle of my toothbrush. "But you can mostly do it, can't you?"

"With time. And money."

"Oh sure."

"I've got a million other problems to fix first." I began to shift my weight from foot to foot. I looked at my watch again. "I'm running an enormous set of programs on the computers. In Osborne Hall. We've got to show it's possible first, or there won't be any government moneys. Or private moneys, for that matter."

"What? You've got a linkup here?" He turned off the water and dropped my toothbrush into the suds. "Can I look?" It wasn't really a question.

Johnny was gone. I blinked, and he was out of the room and down the hallway, past the kitchen before I could catch him. I couldn't believe that a man of his bulk and sobriety could move half so fast. "I just have to take a glance. Real quick. It won't take time at all—"

"The thing is—"

"Is this it?" The linkup screen was covered with data. Heavy sabertooth skulls floated beside population estimates, fire estimates, weather projections, and so on. "Hey," said Johnny, "this is neat!"

"Actually," I said, "it's rather confidential."

"Maybe I ought to get a drink then, huh." He looked at me, deadly serious. "Got any in the fridge?"

"I don't think so—"

"Let me check." He found a couple cans of beer, offering me one and opening the other and giggling when the foam dripped to the carpet. "So show me something," he said. "Some other stuff."

What was simple and quick? "Here." I touched buttons, summoning a first-generation map of the state. Fifty years from today, I explained. Assuming everything moved according to the timetable. The big trick was starting with all the facets in balance. Not in their final climax state, no, but at least something stable and workable. "The prairie forming around us now? The tall grasses? They were native a couple hundred years ago, but they're not the true native community. Not in the strictest sense. The megafauna will require different vegetations—"

"Yeah?"

"For the past 5 million years, give or take, we've had rich and varied ecosystems. Particularly between the ice ages. Camels and mammoths and pronghorns, all sorts of species. Plus the predators. The lions and cheetahs and sabertooths and short-faced bears—"

"Bears?" he echoed. Nodding.

"We'll need to build the species as we need them. From their close relatives, or from scratch. Each gene team projects a species, and they're locked into computer memory." I gestured. "I test them and try to make corrections, hopefully small ones, and the gene teams get angry and start building new versions."

Johnny kept shaking his head.

"Once started," I admitted, "the project could take centuries-"

"I love it!"

"A lot of it will be public land. For the tourists. They'll come from the coasts and down from space. On holidays and whatnot." I waited for a moment, then said, "Access will be controlled. Small electric planes will silently take the tourists to overlook points and campsites, and the rest of the country will be wilderness. An enormous, fresh-minted wilderness." I didn't mention the enclaves scattered here and there. There would be half a hundred enclaves for the wealthy; a substantial chunk of the start-up costs would come from luxury-minded people. People who would want to leave their descendants parcels of exotic lands and a remarkable solitude. "So," I asked, "what do you think?"

"Where do we live?" asked Johnny.

What did he mean? We?

"The Lakota," he told me.

I looked at him, feeling tired and vague and suddenly cranky. Then I glanced at the map, at the estimates of tourists and native residents, and I said nothing. I just stood there.

Johnny finished his beer and crushed the can, and he watched me. He said, "Aaron, you should think about the Lakota here. You know? We were part of the way it was. Back when. Just like those bears and whatever... we belong in this thing."

"Do you?" I managed.

"Sure," he said. He waved the second beer at me, opened it, and wondered, "You sure you don't want it?"

I wasn't thinking about the beer. I told him, "What we're trying to do... we're trying to re-create the *substance* of the past 5 million years. And Native Americans—transplanted Asians—didn't arrive in credible numbers until twelve thousand years ago."

He didn't seem to hear me.

He said, "I'd like to live in that sort of country."

I looked at my watch.

"Hunt and fish and live the good life," he said. "No clocks. No bosses watching over you. No one expecting anything more than meat from you, and shelter. You know what I mean?"

"Listen," I mentioned, "I need to get busy-"

"We're too damned busy; that's what I mean." He giggled and tilted back the can, drinking and then giving a deep belch. "You ought to talk to your bosses. Get them to let me into the picture."

I said, "No." I was really awfully tired.

"No?"

I said, "I can't. Won't."

"Not for me?" He seemed injured. "I come here and do this favor for you, Aaron, and you can't just give me a sliver of all this? What was mine in the first place anyway?"

"No," I told him. I used a hard voice that surprised even me. I said, "The reservations are going to have two choices. Either they stay as they are today and we'll build fences around them, or the Natives can sell out and leave, returning whenever it's possible. Like everyone else. As tourists, and with all the usual restrictions."

Johnny was puzzled. Surprised.

"What's your problem?" he asked. "What's going on?"

I pointed at the screen, saying, "You don't belong *there*. That's what I'm explaining."

"Why not?"

"Because I'm having trouble just fitting the cats into the picture. The goddamn cats!"

"Aaron-?"

"Quit talking as if you know me!" I snapped. He made a small sound, saying nothing.

"A few thousand Natives running around the place," I said, "and you know what would happen? You sure as hell wouldn't be hunting with bows and arrows, would you? You'd starve if you had to do that."

"So I'd use my rifle. I'd just take what I needed—"

"You sure didn't take what you needed twelve thousand years ago. You didn't!" I said, "Your ancestors crossed over here at the end of the Ice Age,

and you know what happened? The megafauna went extinct. In almost every case. Mammoths. Mastodons. The giant bison and whatever. And that includes the predators and the huge scavengers. They're dead because they didn't know how to cope with you. You slaughtered them, and the changing weather killed the rest, and don't give me any of that red-man-in-tune-with-nature crap. All right?"

He was staring at me, his face blank and hard.

I pulled my hands through my hair. I was shaking in my hands and everywhere. The red pills had me shaking.

Then Johnny Whiteeagle said, "I wasn't talking about being noble," with the smallest, darkest voice possible. "What did I say?"

I sat down. I had to sit.

"Hey," he told me, "I'm a poor guy with problems. O.K. My old lady says I drink too much and I'm lazy... but hey, you don't want to hear my story. Do you?"

"I've got my own troubles," I replied. That was the bottom line. "I'm sorry. I've got to get back to work. I'm going to have to ask you to take your tools and leave."

"Yeah." He walked out of the room without another sound. He went to get his mechanical spider, and came out into the living room with his eyes fixed on me, watching me, and there was something showing. I saw something. "You could have acted nice," he told me. "It wouldn't have cost you anything."

"How do you want to be paid?" I started looking for my credit cards, and he said:

"I'll bill you."

So I turned my back to him, feeling his eyes. The apartment door opened and closed, and I listened to him on the stairs and got up and went to the window, watching him appear below me. A battered van was parked on the curb, a shabby white eagle painted on its side. I was still shaking, maybe worse than before. He got into the van and sat motionless, looking straight ahead, then he bent and brought a long-necked bottle out of somewhere. He drank and then drank some more, putting down a terrific amount of liquor. Then he started the van and drove out of the sudden cloud of blackish smoke. He didn't look my way once. Not even a glance upward. It felt good to have him ignore me, and I started hoping he would get good and drunk and sleep it off, forgetting everything. Particularly me. I got back to work after a few minutes.

It took me forever to get into the right mood again, but then things were fine. The trouble with the sabertooths, I learned, wasn't too bad. I made the adjustments in an hour, dropping their intelligence and plugging the new parameters into the memory, then I put the new slow-learning cats into the imaginary landscape. "O.K," I said. "Go."

Everything was up and running. One generation, then two. I watched slivers and wisps of the whole, at triple speed. Everything had a certain simplicity. This was a model, after all. The cats and bears were rounded shapes, and the grasses were the same impossible green. Bright and lush. Each element was an elaborate estimate, and I found myself explaining the details to Johnny. For some reason I imagined him standing behind me, looking over my shoulder. "The gene teams will make adjustments according to my recommendations. Then I start over again. It isn't that we want to get everything right. That's not the point. But a good working model is what will impress our investors. The government agencies and the various billionaires." I paused for a minute, then I told him, "If I just had more time, I could be more exotic. But this is pretty good. All things considered."

Three generations. And no troubles yet.

I made a fresh pot of coffee and a sandwich, then I ran my kitchen faucet for a long, long while. As an experiment. I watched the water spin down the drain, and I sighed, going back to the linkup room—

—and finding nothing.

The screen was black. Utterly and profoundly black.

An outage somewhere, I thought. I sat and ate my sandwich, sipping coffee and waiting. Telling myself it was nothing. A power outage down at the campus, and it wasn't the first time. Only, maybe I knew I was fooling myself. Thinking back now, I have to wonder. I just sat there and waited, never checking with the university or listening to the news. I kept telling myself someone had dug into a power cable, and I waited.

My phone sang out after a long while.

I stood and went to the living room. I can remember every step. I remember the project head shouting at me before the receiver was to my ear, telling me, "We've got some friend of yours here, and he says you'll understand. He says you'll know what this is about!" He said, "Aaron." He said, "Do you know what your buddy did? He showed up here and said there was a problem with the building's pipes, and he went up to the top

floor and opened a pipe and lowered a fucking pipe bomb down level with the computers—"

"I see," I managed.

"—and it's a goddamn miracle nobody was blown to pieces." I said nothing.

"The son of a bitch is shitfaced. Do you hear me?" I nodded.

"Do you hear me?" He said, "He wanted me to call you and give you a message. Are you there?"

"Sure."

" 'We did it again.' That's the message. The redskins did it again.' Whatever in hell that means!"

"It's bad?" I wondered.

"Oh no, not too bad." He made a cutting sound, then said, "Just everything is lost. Data and the simulations and a fortune in hardware... and we're finished, Aaron. I don't know how you pissed him off, but I'll have you know—!"

I hung up on him.

I sat back down in the linkup room, watching the black screen and listening to the phone sing. Then I stopped hearing it. All at once I was pretending that it was a thousand years from now, from here, and I was walking on a green savanna filed with huge herbivores and fierce predators and condors half the size of planes. It was really rather funny, I realized. Funny-strange. All the work I'd done on the project, all the hours invested—the caffeine and the pills and the runaway tensions, too—and this was the first time I'd imagined myself as being part of that landscape. It was so strange to realize that fact, and after a while the phone quit singing, and the room was quiet, and I could smell the faint stink of grass burning somewhere.