Somewhere around what would have been the halfway point of the sex, the radio turned on. Laney was never sure, even years later—affair forgotten, transgression forgiven, house sold, another inhabited—whether the radio had been left on by her husband, on his way out into whatever night-wandering it was that then so occupied him. Had the radio been silent, tuned between frequencies, and simply caught some transient reflection off an inversion layer or a distant mountain storm? Or had it, somehow, brought itself alive and into being, dials lighting to a 60-hertz sinusoidal hidden somewhere in the machine that flickered up regular as any heart? Commanded or not, though, static for one brief moment shattered through the house, windows quaking in resonance with the pink noise.

It had been so long—Edwin had been coming home at unpredictable hours, and the boy lived with one of her coworkers—that even the sudden static was not distraction enough to stop. She placed her hands on his hips, and she forced herself to moan. The boy, in general, needed too much encouragement. “Don’t stop,” Laney said. The noise rose, and she could not even hear the scratch of the sheets on the backs of the boy’s thighs, or her own breath.

The boy—she only ever thought of him as “the boy”—tried to keep going, but the static towered and loomed through the house, so she finally pushed him off and checked that the condom was still on and flicked the light in one motion. “It’s not him,” the boy said, “I’ve been looking out the window for his car.”

“I can’t concentrate,” she said, almost shouting, and she crossed to her husband’s radio room, prepared to navigate the racks and racks of matteblack tuner heads and amplifiers and signal switchers he, every morning, dusted to the sheen of polished silver—but one machine flamed alone in the dark space with indicators and lamps backlit submarine red, amplitude bars oscillating wildly.

When she reached for the tuner, the static cut out. The sudden silence haunted through the house. All vibrations stilled to mute, perfect quiet.
The radio trilled a cascade of descending tones, and a synthesized progression of numbers—“One, seventy-two, one, seventy-two, eighteen eighteen eighteen”—began to repeat. “One, seventy-two.” She stood fixed, as at the focal point of reflected signals. “One, seventy-two.” Laney’s arm hung in the air. The numbers stopped.

A voice rose from the speakers—a voice with tones and overtones and ringing harmonics pure as the strings of a harp, calling, over and over, “The decline of the American bison, the decline of the American bison, the decline of the American bison . . . ”

Laney hit the master breaker and everything died; circuits in the hidden depths of the equipment bays clicked once, twice, were still. The fans spun down, and the voice, if it rattled at all in the far corners of the house as an echo fading, faded fast. She stood in the black space, all the heat of the equipment convecting in invisible kilowatts all around her, and she was silent for a long time. The boy asked if she was coming back to bed, and, thinking how long it might be before she had another chance, she almost turned for the door—

Some compulsion unknown to her until much later commanded her, though, to reach out and hit the breaker back on, but the voice was gone. The face of the radio glowered a frequency right at the edge of the tropic bands, 5055 kHz, but the speakers gave only the slightest breezy noise, hazed guitar arpeggios wavering in and out that she might once have recognized as “Lucha de Gigantes,” and the occasional clipped sideband laboring up from the automated marine weather broadcasts on the Sea of Cortés. The boy, in the bedroom, started snoring, and even then she just stood, listening, wondering, waiting for that voice, tuned as perfectly as a quartz crystal, to return, but it did not.

* * *

She almost told her husband about it when he came home, half-awake and swerving into the driveway, somewhere around 5:00 a.m. She was still up. But he only mouthed an apology, and he vanished upstairs, into the sheets he did not notice had been changed, already, again. When her alarm went off he did not even stir. Just before leaving she thought of checking the transmission again but for some reason she was spending more time on her hair these days and then she had to rush.
At the guardhouse, Thompson was looking out into the east at the mountains layered in rain when she pulled up. “Early for storms,” he said, running her badge over the machine, and when he handed it back to her he was still staring off over the plain at the bladed ridges, vanishing even now into the lowering clouds. “How is your husband, ma’am?” he asked quietly, scribbling in the log without seeming to look at it.

“He’s fine.”

“Haven’t seen him in a long time.”

“He’s working from home.”

“You guys getting ready for another shot?” he said, finally turning.

“Friday,” she said.

“Don’t blow up New Mexico,” Thompson said, distant.

“I’m just the electrician,” she said.

“You’re all rocket scientists to me,” Thompson said, then waved her through. Something flashed in the white optics laboratories bulbous and towering in the foothills, and a pair of F-16s from Kirtland angled over her in formation, engine roar trailing in a five-second delay that hammered over the windshield like cannon fire. By the time she turned into the lot at Technical Area IV the jets were lost to the horizon. The new sign said, “Z Pulsed Power Facility,” over a yellow and black Zia sun symbol. The exterior of the building was blank; it did little to suggest that, buried far within the white walls, a device of dazzling complexity channeled energies incalculable.

She spent the morning going over the Marx generators for Friday’s shot, checking and rechecking the tables from the capacitors submerged in the heart of the machine. After two hours of data entry, she realized she had not been in to look at it in months; as though an electrical engineer, lost in cascading megavolts and milliamperes, might not, sometimes, need to see the yield, solid and towering, of all her focused effort; as though there were not, beyond the diagrams and spreadsheets she augured hour after hour, some definite, delicate tracery of conductors, substantial as the precious metals (and made, indeed, of precious metals)—some real world beyond the symbols, some real arrangement beyond the abstract patterns.

From the platform looking out over the space, the Z-machine was a radial array of dark, prophetic chambers: black towers of Daniel Hamilton
magnets, beamguides and waveguides and a thousand perfectly machined armatures of aluminum, steel, beryllium. At the center, almost entirely encased in detectors and prisms—angular, faceted, and crowding around like a gaggle of stealth fighters—a pedestal held, in gossamer spindles of wire, the tiny cylinder of gold around which the entire apparatus seemed to coalesce, at which every immense device seemed to aim.

She had forgotten; she did not look at the machine because it gave a sensation of latent doom, awaiting only the trigger. Technicians clad in white cleansuits, moving through the nested space carrying gunmetal components and gleaming orbs of unknown origin or purpose, seemed to do so in a trance, without touching the floor.

“You don’t come up here anymore,” the boy said, and she startled and glared at him.

“You never look tired, you know.”

“The miracle of youth,” he said. “When’s Edwin going to his conference again?”

“Two weeks.”

“Still want to go to Pagosa Springs?”

She looked at him—twenty-four, broad forehead, lazy, smoked-over eyes that belied the fierce intellect and brutal determination to be correct that she’d seen him wield against the other X-ray physicists in the all-staff meetings, and that had at first annoyed her, and at the same time so captured her attention. When he began following her down the hallway whenever she passed, she had guarded herself against foolish improprieties with a shield of mocking sarcasm—“I don’t know where they keep the schoolgirls; stop following me,” and “They let moping puppies get Ph.D.s in high-energy physics now?” until she said, “You’re tall for a whiney baby,” two days in a row, and the laugh he gave when he caught her mistake was the first prying instrument that broke some besagew off her armor, so that her heart thrilled, unexposed for years before.

Now, though, she said, tiredly, “I don’t think that’s a good idea.”

“You’re probably right,” he said.

In the space below, the technicians called to clear for the fluid filling. Arrays of transformers, lining the octagonal cavern three-deep on the walls all around, chattered as they warmed.
“What do you think of that transmission last night?” she said. “You told me Edwin’s always finding weird stuff on his radios.”
“Well. Wasn’t there . . . didn’t you think it was beautiful, the voice?”
“I don’t really remember. What did she say again?”
“‘The decline of the American bison.’”
“Maybe an information station from Yellowstone or something. Shortwave carries forever. Who knows. People send all sorts of strange signals, don’t they? Calling out into the dark.”
“I’ve heard it before,” she said.
He just nodded. A series of lights above the ring of the machine flicked to green and the central ring began to fill with water, rising to submerge the core of the device, armature visible now only as some murky dreamshape that warped with the waves, refracting glints of color and light. Figures blackclad in wetsuits and scuba gear appeared and sat on the grating, dangling flippered feet into the pool.
“This one’s going to be a good shot,” he said. “We’re going to get a lot of really good data, I think.”
“I just make sure the thing turns on,” she said. “They’re all the same to me.” She turned and left, and the boy did not look after her.

† † †

In the afternoon she excused herself just after presenting the latest tolerance figures to the Electrical Team—“Marx banks one through eighteen are well within spec, Marx nineteen was offline for the last load test but we should have figures on it tomorrow, and Marx twenty through thirty-six pulsed late. The divers are swapping out the faulty switching laser now . . . ”—and from the balcony she watched the rush of afternoon flights from Dallas and L.A. bank out over the mesa to land.
Laney left early and as she drove she turned the car radio through its frequencies—though they were the wrong band by megahertz and megahertz—but caught only the mariachi station repeated up from El Paso and the local rock channels still curiously trapped in 1997. “Standing Outside a Broken Phone Booth With
Money in My Hand,” when it came on as she waited at Eubank and Carlisle—where the cops had closed off the block and were wandering around with assault rifles—took her back to autumns at St. John’s College, to learning Greek, to jumping the reservoir fence with Edwin, who did not fish but loved to watch her cast out over the water. When she imagined herself then, caved away in the winter when the snow lowered down off the mountains, and they huddled around the cedar burning in the adobe fireplace and traded Bohr and Husserl, she could not imagine herself as twenty or twenty-two, shoulders and calves taut from constant treks into the Pecos, with glasses before she had the surgery—but thin, hair dyed dark to hide the gray, hands, as they were now, snarling and narrow where all their effort seemed expended just to grasp the clay teacup she saw herself sipping from. She would have to dig up old pictures to remember what she had looked like.

Edwin was awake when she got home, dazed as he filled the blender with unlikely combinations of tropical fruits. His hands shook.

“Where was it last night?” she said.

“Valles Caldera,” he said. When he put the cap on the blender the plastic clattered before he found the fit. “Too much coffee,” he said when he noticed her staring. He hit the button and the room filled with noise.

In his radio room he had tuned way up into the high band, so when she turned up the volume there was only Morse beeping out the identifier of some aircraft navigation beacon—Durango? Her Morse, though Edwin had taught her once, was ill-practiced. She turned the master receiver back to 5055 kHz, but there was not even a hiss. Edwin came in and said, “I was recording.”

“Sorry,” she said.

“It’s all right,” he said, and he sat down at the bench, green concoction filling the room with the scent of wheatgrass.

“Are you all right?” she said.

“I’ve told you, I’m fine,” he said. “Please stop asking.”

“I’m worried about you.”

“I’ll settle down soon. I promise. No more late nights.”

“You’ve been saying that for a very long time,” Laney said. He reached for the receiver and paused at the readout. “Did you change it back?”
“What?”
“You changed it to 5055?”
“Yeah.”
“Why?”
“I . . . ” She watched him, trying to read the tension in his brow and around his ears; he would not turn to face her. “Have you been hearing a numbers station recently?”

Edwin placed a finger in the juice, took it and touched it to his tongue. “No. No numbers stations around here. Not for years.”

“When are you going to go back to work, Edwin?”
“I’m not,” he said. “They suspended me.”

Laney watched him as he took the anti-static brush and ran it around the edges of the receiver in front of him, and when he tuned it back up into the high band—5055, on the readout, vanished into a wheeling blur of ascending digits—she closed the door.

* * *

She almost left a note for the boy with the X-ray physicists, but when she stuck her head into their office and they all looked up and seemed to recognize her immediately, she changed her mind and fled. Circling back in the ring hallway that surrounded the machine, she had to skip her feet to avoid the engineers and technicians and machinists heading in the opposite direction, carrying plans, devices, coffee. The atmosphere always changed right before a shot—in that everyone was rushing around preparing, and in that they began to filter the air coming into the building, so that her transformers did not clog and explode. The boy was not following her anymore, apparently, and was nowhere to be found, but she had little left to do anyway. She sent him an email. She wandered the hallways, watching the preparations for the shot. She went and saw the machine, gleaming under the water.

When it fired, the Z-Machine converted 350 terawatts of electricity—enough to light a tower of lightbulbs stacked end to end from the surface of the sun to well beyond the orbit of Neptune—into a vanishingly brief torrent of X-rays, aimed into a tiny golden cylinder. The physicists just called it “the target,” but the hollowed cylinder was technically a “hohlraum”—a word Laney

Daniel Hamilton
had come to adore, and to use inappropriately and as often as possible, so that she asked for “hohlraums of sliced beets” and arrived to pick up “hohlraums of progestin.” The clerks and pharmacists, never surprised, seemed at least glad that she was smiling.

Buried in the center of the Z-Machine’s cylinder of gold—no bigger than a thimble—was a tiny sphere of hydrogen. On firing, the hohlraum imploded instantaneously at temperatures elsewhere unfound except in the deepest cores of red supergiants. The hydrogen fused to helium. For a tiny, ephemeral moment, in the heart of that vast device, a star flashed, and then vanished.

When Laney imagined all of the electricity—it was too much to call it her electricity, because she was responsible only for the timing of the pulse—tunneling in one blinding instant into the target, she almost felt a pang of sorrow for the little hohlraum, vaporizing away in a spectrum of radiation.

When she started there, twenty-six and somehow believing she would do some good in the world, the Z-Machine was still, in its way, an implement of destruction. It had been built, at staggering expense, in the wake of the Nuclear Test Ban Treaty. The weapons physicists at Los Alamos National Labs wanted a way to know their nukes were going to work, and they couldn’t just blow them up in Nevada or Bikini anymore. They built the Z-Machine expressly to simulate what happens inside the warhead of an exploding hydrogen bomb.

But today, the weapons people were out of vogue—they sat gloowering up on their mesa at Los Alamos sixty miles away, gloomy and frowning under statues of Oppenheimer and Groves. Down in Albuquerque, a younger generation of physicists, unaccustomed to cowering under desks, had repurposed the Z-Machine as a testbed for fusion electrical generation. They would provide an endless source of safe, clean energy. The talk in the cafeteria was of saving the world. Faces were bright with optimism, with that utopian gleam in the eye. When she passed, one of the engineering divers was on a ladder over the entrance to their equipment room, hanging a piece of one-by-six on which someone had painted “This is Swords to Plowshares.”

Even as, out beyond the walls, everything seemed less and less to go as it should—ice caps melted, currencies faltered, nations destroyed themselves—here, they were building a perfect world, almost visible there in the machine, glinting under the waves.
When she had first heard of high-energy physics, she had thought of polished surfaces of unknowable materials in exotic arrangement, of lecture halls where the air trembled with the power of genius. Even she would admit that the machine itself seemed bizarre, unknowable, beautiful—but out here, in the hallways, the razor-edge of human brilliance seemed muted, and all further possibility diminished. The fluorescent lights in ranks on the ceiling flickered and yellowed, the same as anywhere else.

When she sat in on the physicists’ meetings she could follow along well enough; she had liked, in the first stages of their affair, to surprise the boy at opportune moments with talk of the Lawson criterion and Rayleigh-Taylor instability. But how much was there left to know that others knew, that she did not? She had no delusions of her own genius, but she was a fast learner. She was only an electrical engineer and knew the basics of everything, really. She felt that only the farthest fringes of exotic theoretical physics were beyond her, if she chose to study hard enough.

Working at the Z-Machine, at the frontier of science, only left her baffled at how little anyone knew about anything. What tiny, gasping creatures, these humans, building, building, building, a body of knowledge still, after all the ages, so small. To be so close to the furthest extent of human understanding terrified her, as vast unknowns threatened, as doubt resolved into the one, complete constant.

Years earlier, she and Edwin, his illness, however it would finally manifest, then only growing in latency, drove the hundred miles down to the Very Large Array to sit on the car in the dark. He was still an idealist; he looked at the rows of enormous radio dishes out in the starlight, and she could see the wonder still in his wide eyebrows, as he imagined the signal itself, curving out across the void, and caught here, just so, in this gargantuan radio eye that humans had built, in the middle of nowhere. He looked like a boy. That aspect of the world seemed, then, closed to her—wonder and inspiration and the joy of the unknown did not swell in her.

The universe tumbled in all directions over them, glowing diffuse and gorgeous, seeming to dare an interpretation. She had, more and more, only herself to shape her response. There was less and less to lean on. “We’re lonely out here, Edwin,” she said.

“You’re dramatic,” he said. The radio telescopes gray on the plain turned with low drones out in the dark, tracking their stars against the awful turn of the earth.
The boy wanted her to meet him at the top of the mountain. The tramway had terrified her the first few times she took it. Vaulting up out of the base station, rocks and mesquite and stunted junipers flashing by the side windows, the creaking car rocked over the first tower and it seemed impossible it would stay on the cables, that it must certainly slip off, go tumbling out into space, spilling passengers out the doors that could not possibly stay latched—

How long ago was that, though, now? She was not so nervous, perhaps, or her inner ears were getting weak along with everything else, so that when a gust of wind up the canyon caught the tram by the side and it rocked wildly and the attendant said, “You see why I like this job!” and everyone gasped and shouted, Laney did not even close her eyes, but only imagined herself floating in the air outside or above the car, hovering up the face of the mountain. At the highest point in the crossing, the scree slope below studded with Ponderosas was a thousand feet down— “If the cables broke,” the attendant said gleefully, “We’d have about twelve seconds to the bottom!”—before the final ascent up the vertical cliffs of the ridge. She never looked back west over Albuquerque on the way up, but only faced the mountains. She wanted the city to be revealed, and she withheld the revelation from herself as long as she could.

The boy was waiting on the platform at the top when the tram slowed into its berth. “Pretty,” he said, but she did not look back, and averted her eyes strangely down the eastern face of the crest and dashed down the stairs. The chairlifts of the ski area were still and overgrown with grasses, the mountain fell, the Galisteo Basin yawned away beyond the gray Ortiz range and the blue, shielded reaches of the Sangre de Cristos, rising peak by peak north into Colorado. Santa Fe curled into the canyons below the alligator shape of the aspen groves just now quivering with green—the last snow on Baldy was going, and even from here, a hundred miles off, the town was brown and gold from adobe, hazed over with juniper smoke. Not so far, but such a different life, or, as she looked out across New Mexico, another age, maybe.

“Why are you still interested in me?” Laney said.
The boy was sitting in one of the chairlifts, rocking it from side to side. “Why not?”
“I’m too old for you. And I’m married.”
“The married part’s your business. And I don’t mind your age.”
“You don’t mind?”
“That’s right. I don’t mind.”
“What do you want from me? I’m not going to leave Edwin.”
“I don’t want you to leave anybody,” the boy said.
“Then what?”
“You’ve got the reins,” he said. “I don’t want to fall in love, or anything like that. I’m just passing time.”
“You’re too honest.”
“The miracle of youth,” he said.
“I can’t see you anymore,” she said.
“That’s fine,” he said.
In the distance, the houses in the etched hills above Santa Fe caught the light—the windows of the library at St. John’s, even, up in its perfect little canyon, flashing in the dusking sun—and of all the signals in her life that begged for interpretation, this one struck her simply, the glimmer of remembrance, a flash, from other places she’d called home, in other times.

* * *

Edwin had not been her first lover. She was shy, but not that shy. There had been alcohol involved—a case of Gruet at a professor’s party, in October, “Thirty-Three” from a tapedeck, weird Virginia who had dropped out shouting about what it had been like in jail, when she got her third DWI, the professor going on and on about *Madame Bovary* to some starry-eyed sophomore from Texas, his hand on her knee and, hour by hour, advancing higher and higher up to the hem of her cotton skirt—and Edwin there with his radio, set up on a cardtable in the living room, rewiring it after he’d blown a fuse in the house. “You just don’t know what you’re doing,” one of his friends was saying. “You’re going to burn the place down someday, all that crap you fiddle with in there.” The friend was holding a copy of *The Sorrows of Young Werther* and would, a little deeper into the brut, be holding a recitation on the deck. When Edwin got the fuse in and came back he turned on his radio,
adjusted the volume, and leaned over the device with the intent expression of a conductor, baton in the air, just about to begin.

With his hand on the tuner he sang through the frequencies, catching, deftly and expertly, without the least searching or hesitation, all the cast-out, trembling signals that vibrated in the air that night. A pirate station—“This guy comes on every Thursday, he’s great,” Edwin said—where someone was experimenting with a keening theremin. Up into the VHF sidebands, where he caught haunting beeps and clicks that rose and fell at six-second intervals, and that he said were the insistent calls of a malfunctioning satellite tumbling over them. An amateur two-way in Panguitch, where a man was coughing and wheezing and wondering to some silent counterpart if he had hantavirus. Edwin, cradling the radio before him, was perfectly still, except for his hand, so firm on the dial that his wrist seemed to shake, and when he turned it next it caught, somewhere in the tropic bands, somewhere, on the dial that Laney strained to see, around 5000 kHz, a lapsteel guitar, a song she recognized, a song that made her think of her father, kitchen door open for the heat, telling her about when he watched Apollo 14 fire out over the Atlantic into the east.

Then Edwin’s radio sparked and the fuse blew somewhere and the dining room light went out. “Damn it, Edwin,” said the friend, and he thumbed through his Goethe, ready to be the center of attention. But Laney, shy, but not that shy, had asked to see the radio, and she had asked the professor for a screwdriver—the professor was pleased, and used his departure, and subsequent return to the little Texan girl who seemed now less enamored than intoxicated, to skip a few inches up to the inside of her thigh, even as he read, “... chaque matin, à son réveil, elle l’espérait pour la journée, et elle écoutait tous les bruits, se levait en sursaut, s’étonnait qu’il ne vînt pas; puis, au coucher du soleil, toujours plus triste, désirait être au lendemain ...”—and Laney found the case short quickly and easily where a frayed wire was loose. “I’m a bit of an amateur electrician,” she said.

“No amateurs here that I can see,” Edwin said, and the radio came back alive and though she did not touch the dial or adjust it at all, suddenly rang out in a synthesized voice.

“Eighteen ninety eighteen thirty-four twelve. Twelve. Thirty-four. Twelve.” Everyone around the house stared, and Laney’s hand on the machine did not move. “Twelve. Twelve. Thirty-
four eighteen ninety eighteen thirty-four twelve. Twelve.” Even the professor, hand now well beyond whatever unmarked line on an undergraduate’s thigh he was not strictly supposed to cross, stopped to listen.

“What is that?” Laney asked.

“It’s a numbers station,” Edwin said.

“What’s a numbers station?”

“A code broadcast. Nobody knows where they come from. They just show up from time to time. They use shortwave because it reflects off the upper atmosphere, carries for thousands of miles, sometimes. Some people think they’re to give coded instructions to spies. We’re not far from Los Alamos, I guess. Maybe the Chi-

“Have you heard this before?”

“Not this one. 5055 kHz? No, not this one.”

“Eighteen thirty-four twelve,” the synthesizer said, and in the background a low, singing voice intoned, a murmur, almost, too faint to hear, before the signal cut.

Even as the friend gathered the crowd on the balcony, Laney asked Edwin to come outside with her, and they stole down to the arroyo and the cicadas droned in the few cottonwoods and Fiestas de Santa Fe fireworks lit up over the diamondstruck folds of the quiet town. They crossed out onto the plateau and ran along the fenceline of a far, low casita. The windows were lit yellow, and Edwin said, “Think what it was like when they built that house. Seventeenth century, probably. I bet you can still see the finger-

For the next few days they hunted the numbers station through the badland canyons below Los Alamos and into Nambé in Edwin’s old Toyota. They chased “Eighteen—” and “Ninety—” that glittered away from the dial that Laney twirled, radio cradled in her lap as Edwin tore down county roads above Cundiya and the church at Truchas. They heard a transient flash in the wild switchbacks past Cochiti where the highbeams etched coyotes to glass against the night. A few days later they caught the faintest tremor of the numbers station as they watched the sunrise over Abiquiu.
They went north out across from Taos, the plateau paled with the first snow, and the code glimmered up as they approached the Gorge Bridge and Edwin stopped right in the middle, so she went and leaned out over the canyon into space, imagining the fall. In the car he said, “I’ve got it! I’ve got it!” and the voice came through, “Thirty-four. Twelve. Eighteen,” and she ran back to the car when a man and his boy came hammering down the road at them in a rusted blue Ford pickup. “Mark it on the map!” Edwin said, hurtling them into gear, radio breaking, even for a moment, into some other voice—a voice of harmonies and harmonics so perfect, a voice like a tuning fork of spun gold, that said, “... the American bison was...” as they fired across the gorge, Edwin staring wild-eyed at the radio that sang, “... the American bison was...” so that he was barely looking at the road and they almost went over the guardrail into the canyon a thousand feet down, but they did not—“... the American bison was... the American bison was... the American bison was...”

As they crossed the bridge the signal faded. The voice broke. The communication, whomever it was for, whatever it had meant, whatever empire it propped or toppled or whatever immutable truth it cast out across the spectrum, failed, trembled into vapor all around, and Edwin said, “It’s going,” as he drove. Laney sat exhausted with the radio in her arms like the last clay tablet had just been broken, snow on the piñon and the cottonwood and the horses moving along the creek past the pueblo into Taos, where in the motel room they pored over the signal markers she’d scribbled over northern New Mexico, where they failed to find any pattern or intent, where they removed their clothes, one by one, as the radiator pinged up. He was not her first lover. In the morning they went back to Santa Fe.

That Christmas Eve he held her in his jacket in the cold on Canyon Road, strung end to end with candles in small paper lanterns, they huddled with the carolers in the courtyards of the houses of strangers, they warmed in art galleries where statues of Hopis stood on one foot and eagles leapt off their arms. “Find the River” was on the stereos. There were bad paintings of naked ballerinas and the artists were saying, “I’m fascinated with the ineffability of the sexual.” Edwin made faces behind their backs, and when she was brave enough to go back out into the cold, a herd of snow-covered bronze bison towered over them, looking noble and
eternal, brassed eyes lit by the candelarias lining the eaves. “Too bad we killed them all,” Laney said.

“Not all of them,” Edwin said. He was looking up; someone was launching paper hot air balloons from the elementary school. The lanterns rose out over the town and burned up a mile high, showering sparks.

“What do you think that numbers station had to do with them?”

“With what?”

“With bison,” she said.

“It’s just a code,” Edwin said. “Anyway, we lost it.”

“But what does it mean?” Laney asked. She watched the statues, as if waiting for them to surge into life all around.

“To us?” Edwin said, and he looked at her. “Nothing, I guess.”

At Zozobra the next fall he asked her to marry him. She was so shocked at his choice of time and place—in the park the crowd cheered when the three-story effigy roared and lit with flame, arms turning as it shrieked and burned, everyone around them slavering with shouts of “Burn him! Burn him! Burn him!”—that she had known it was perfect, she laughed, she said yes immediately, and they held each other and watched the marionette until it collapsed in fire.

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Albuquerque, when Laney and the boy hiked back up to the crest of the mountain and looked out to the west, waiting for the tram down, was gray and pink in the light, vast, the Rio Grande Valley like a jaw gaping, swallowing up the city, the green and gray lips of the river almost invisible in the haze. A fire was burning in the Gila, out of control. To the south the black runways of the Sunport lurked below the weird domes and towers of the laboratories, everything white and faceted like some future colony on some unnamed planet. In the hills the Air Force kept no-one-knew-how-many thousands of nuclear warheads, cradled in black bunkers that traced out beneath the mesa. She often forgot about it, pulling into the lot at work. When she went over her electrical testing tables for the machine that would save the world, the last arsenal of total destruction waited just below her feet.
The horizon was red out over the desert.
“No hard feelings on my part,” the boy said.
“Good,” Laney said.
In the parking lot at the bottom he kissed her one last time, then drove away.

Edwin had not quite left when she got home, and he stood in the driveway, tying his hiking boots one lace over the other. He looked at her when she pulled up, and then got into the car and started the engine; the roof bristled with antennas that began to bob gently with the rough idle that made the car shake. She stood at the window until he rolled it down.

“Where do you go every night, Edwin?” she said.
“I told you. Valles Caldera.”
“But why? That’s a hundred miles from here. What’s out there?”

“Nothing, really,” he said.
“Are you looking for something?”
“No. Nothing specific, really.”
“You just drive out into the dark with your radios?”
“I guess.”
“Are you hunting a numbers station?” she said.
“There’s no numbers stations anymore,” he said. “They use the Internet now.”

“Are you cheating on me?” she said.
“Don’t be foolish,” he said, and he reversed into the street, whiptails and VHF masts swaying wildly over the car at every imperfection in the asphalt. Laney went upstairs into his radio room and saw that he was recording but killed the tape anyway. She sat in the dark, and she turned off the amplifiers so the static went out of the speakers, and she turned off the power conditioners, and she turned off the fans, and everything was still, windows blacked out, no light or sound from anywhere so that she could have been anywhere, cast into the universe—

And yet she could not imagine herself anywhere but exactly where she was, in that radio room, in that house, with her husband miles off and even now vaulting up some distant highway with the going light, with her bad lover banished, with the whole stretch of darkening country all around her. New Mexico in that gloom gathering now so empty, so yearning, so etched with warring visions—what to make of the world? What to destroy? What to build? What to say, and to whom?
In the dark, she finally summoned up that picture of herself, however many years back, in the arroyo with the weird radio boy, grinning stupidly after he kissed her. The thought of the girl hung in the air in the dark radio room like an electrical arc. All intervening space and time seemed blackbody opaque; they resisted all electrostatic potentials; there was no map or diagram that could chart her course through the years and still yield any measurable data. What had happened?

There were the particulars, of course—they studied. That had brought them here. They went to graduate school, but Edwin never finished—Sandia National Labs offered him a job in his third year, developing cryptographic protocols to communicate with ballistic missile submarines. She said she was not comfortable with him working for the military. But when she finished her Ph.D. in high-frequency switching, he got her a job at the Z-Machine; back then, it was still a toy for Teller’s progeny to salivate over, but she thought she would be able to distance herself from all that. She just made sure it turned on. She hung a picture of Oppenheimer over the door to the Electrical Team office, upside down—finally smiling.

They bought the house, and Edwin spent more and more time in it, fiddling with his radios. She grew silent and reserved. She stopped going to the shots when they fired the machine. Such tremendous power surging from nowhere, and then gone. When she stood looking out over the machine, it felt like being at the heart of a vast bomb, capable of annihilating entire spaces unknown.

But if that was the key to her experience—some incomprehensible device, built for destruction—where was she now? Peace bloomed. Utopia beckoned. But she was still in the house, and her husband was still out there in whatever black midnight he labored across, slowly going mad.

In the radio room she was not sure if she had slept. The house was still and settled and perfect. There was no light from under the door.

As she hit the components on, one by one, in practiced, expert sequence—Edwin had only had to show her twice after he built it, and she had it memorized—the radio lit and groaned, but when she reached for the tuner, she could not bring herself to touch it. Her hand hung in the air before the machines, lit red by
the flickering readout, 3323 kHz, just a hiss, just noise, just the old echoes of all those dead stars scattering out into the dark.

* * *

“It’s the big day,” Thompson said at the gate.
“Yeah,” Laney said.
“You just make sure it turns on, right?”
“Right.”
“Well,” Thompson said. “I hope it turns on.”

The boy was not at the shot. She waited in the observation bunker with the rest of the technicians—few of the physicists seemed to bother anymore—as the divers in the pool made last-minute adjustments. Where they emerged from the water and broke the surface, the machine below warped and refracted in the waves, and glinted.

All the lights went out.

To Laney, in the bunker, the shot came first as a rumble in the floor and the walls—her transformers clicking on and off so fast that the rhythm was lost to a long drone—and when the timing lasers fired and the Marx generators cascaded the energy down into a single pulse, the entire building seemed to stagger on its foundations.

From the lead-shielded observation window, there was a single spark down in the depths, and in the fraction of a second that followed lightning seemed to burst from every corner and angle and projection in the room, long coils and forks violet and blue arcing across the air, tongues lashing, the whole surface of the water overlaid with a skein of tracing fire. For a few moments after it was dark, the transformers banging back down in the floor, and the space before them dimly lit only by lingering tendrils of St. Elmo’s Fire, sprouting green and gold from the higher railings, snapping like striking snakes, before fading.

“It worked,” someone said. “I never think it’s going to.”

When Laney closed her eyes, the flash still lingered there.

* * *

When she got home, Edwin was taking the receivers out of the rack in the trunk of the car.
“Did you find what you were looking for?” she said, after she watched him work.

“No,” he said. “Nothing out there.” He cooked dinner, the house filled with the scent of ginger and lemon, and they ate watching from the patio as the face of the mountains, rising up from the plain beyond the house, reddened in the sunset to the color of watermelon.

“Will you talk to a doctor?” she said.

“For what?”

“I don’t know. I haven’t been able to help you.”

He went upstairs, and she followed him to his radio room, where he sat at the bench and went over his notes from the day before.

“Are you recording?” she said.

“No, go ahead,” he said.

When she closed her eyes and twirled the tuner, all the far, lonely signals of that quarter of the world came coiling in: a flight student somewhere off Baja who apparently had not learned his radios yet and kept muttering, “El profundidad, la providencia, la compensación,” over and over. Thunderstorm sferics, from lightning out in West Texas that veiled the Llano Estacado with flinders of stellar fire, cast long whistling peals of terror into the transmission, clicks, whoops that broke like whalesong. Turning the dial, she hesitated when, from points unknown—from all points, perhaps, or reflected off some distant planet so that it descended, returned perfectly, from the past, from years long forgotten, even by those old enough to remember—the ragged sparkling edge of Santo’s lapsteel trembled. She smiled, and she said, “Oh,” and she leaned against one of the racks of amplifiers, watching out the window the traffic down the angle of Tramway Boulevard in the fading light, “Sleep Walk” quivering out into the evening. The readout gleamed 5055 kHz.

“I shouldn’t have sold my guitar,” her husband said.

“Edwin, that was . . . what, ten years ago?”

“Just listen to that. Do you want to dance?”

She stared at him, and though she did not believe he would, he rose, and he held out his hand, and when they turned, the lights of the amplifiers around them wheeled like cascading stars, or the tumble of galaxies, and she kissed Edwin on the side of the neck, where she had not kissed him in—what, ten years?—and was
surprised to recognize instantly the particular softness of that skin. For a moment, she swayed, with that guitar keening days not better, days maybe sadder, but days altogether missed, whole planes of experience so endured in their own moment but, in hindsight, the height of some pure sensation, never to be felt again. It was not even her song—it was not even her parents’ song. They were all too young, and so she felt that too—the missed moment. The lost age, if it ever existed at all, when dreams were realized. When the needs of the time were matched to its promise. Her father, watching the moon rocket rise out over the water.

So, when the transmission skipped once, right before the last note of that perfect trill, so it was like a blow to the heart, and then cut entirely—

Even for all of the anticipation, keening dread, surging desire she had felt to know, to understand, to find the source, no matter how far removed or how disappointingly prosaic it might have turned out to be, she could only close her eyes and say, “Oh, no.”

5055 kHz burned in the dark.

Her husband, still dancing, spun himself dramatically even in the brief silence, and he laughed and said, “Listen!” when a progression of numbers rose to fill the space, “Eighteen, seventy-two, twelve. Thirty-four. Eighteen. Twelve.” He grinned, but Laney turned away, until another voice that crashed, like the sudden shattering across entire front faces of skyscrapers too tall ever to be built, of innumerable plates of crystal—

“The decline of the American bison, the decline of the American bison . . . ”