


S O F I A S A M A T A R

Tender

 I am a tender. I tend the St. Benedict Radioactive Materials Containment Center. I perceive the outside world through treated glass. My immediate surroundings are barren but comfortable. I can order anything I like, necessity or luxury, from the Federal Sustainability Program. The items I order are delivered by truck and placed in a transfer box that decontaminates everything that enters it, including the air. The purpose of this system is not to protect me from contamination by the outside world, but to protect the world from me.

St. Benedict's is meant to be a temporary facility, a place to hold materials destined for deep, permanent burial, but the fears of the public make it so hard to create permanent facilities that no one knows how long this place will be necessary. My job is to monitor the levels of toxicity in and around the containment vault and submit reports to the Sustainability Program. "I used to be very unhappy," I wrote recently to the psych team, "but now I am happy because I have meaningful work." As usual, the psych team gave me an excellent evaluation. I am considered a model employee.

I went through six evaluations before I was accepted as a tender. They had to make sure I wasn't, as they put it, "actively suicidal."

"We know you've been through a tough time," one doctor told me frankly. Later, when I was accepted, she thanked me for my "sacrifice."

I am equipped with sensors, implanted under the skin up and down my back, which enable me to detect changes in toxicity levels the instant they occur. I can feel the degree of these changes, where they are located, and whether they require observation or action. It's like a sixth sense: not at all painful, and far more efficient than collecting and interpreting data. I know, however, that most people find the idea of implantation distasteful. *They've turned you into a cyborg!* wrote my best friend, the one I privately call my hurt friend, the one who still visits me.

So? I wrote back. I reminded her that the earth beneath our feet, the soil we consider the body of nature itself, is composed of air, water, minerals, and organic matter. Earth, the Mother, is also a cyborg. I added: *To tell you the truth, I find it comforting to know how poisonous everything is. I am perfectly attuned to what is good and bad. I always know the right thing to do. Yes, my sensors are strange, but they have given me something akin to a moral compass.*

In my twenty-acre glass enclosure, in my beautiful little house, in my bedroom softened by quilts and golden lamps, I read about the dawn of the nuclear age. I am moved by the young physicists, their bravery, their zeal. The delicate, somehow childish cranium of Niels Bohr. Enrico Fermi's bright melancholy gaze. Glenn Seaborg, awarded a Nobel Prize for his role in discovering plutonium, said: "I was a 28-year-old kid and I didn't stop to ruminate about it." This devil-may-care attitude seems to characterize many scientists and lies perhaps at the heart of all human advancement. Newton sticking a bodkin into his eye to investigate perception. The doctors Donald Blacklock and Saul Adler injecting themselves with chimpanzee blood.

My reading light beams gently across the desert. Insects are drawn to it but frustrated by the barrier of the glass. I fear no human intruder: my hermitage is surrounded in all directions by signs bearing the skull and crossbones.

The history of nuclear physics is a grand romance. It has everything: passion, triumph, betrayal. Those of us who work as tenders have been left holding the baby, so to speak. The half-life of plutonium-239 is 24,100 years.

Once upon a time, the story goes, some young men discovered an element. They soon realized it could produce an almost infinite amount of energy. The possibilities appeared endless, the future dazzling. There was only one problem: the element was toxic.

Once upon a time, goes another version, two young people fell in love. This love produced an almost infinite amount of energy. The possibilities appeared endless, the future dazzling. There was only one problem: one of the people was toxic.

My hurt friend visits me once a month. She used to arrive in a van driven by an assistant, but now she drives herself in a specially equipped car. She is able to walk from the car to my glass wall without a cane. "Progress!" she says wryly. She does not believe in progress.

We used to argue regularly about this, as I worked in an energy lab and believed I saw progress every day. My hurt friend was a dancer. "Don't you see yourself improving?" I asked her. "Aren't you a better dancer now than you were last year?" We were seated in a crowded restaurant and I admit I glanced at my phone to check the time. I only had twenty minutes for lunch. If the food didn't come soon I'd have to take it to go. When I looked up my friend was gazing unseeingly into the crowd, tapping her finger against her lip. "No," she said slowly. "I'm not a better

dancer in any meaningful way. I think there might be something wrong with your question.” I remember thinking how detached and ethereal she was, but that was nothing compared to what followed, after her injury, when she became nearly transparent.

But let us return to the story of the Toxic Lover. She was completely unaware that she was toxic. She supposed, rather, that she was beautiful, talented, and kind, destined to succeed in all aspects of life. Nothing around her contradicted these convictions. Moving from triumph to triumph, she soon had an excellent job at an energy lab, a handsome and devoted husband (the envy of all her friends), a charming small daughter, and a home overlooking a lake. Positive adjectives clashed about her constantly: it was like living inside a wind-chime. At work, she was responsible for bringing plutonium left over from the arms race into use as a source of energy. When the material proved too unstable and the project failed, she quickly recovered her footing and turned to the creation of containment centers. Her team produced small green stickers to show their commitment to the earth. Her daughter stuck the stickers all over the doors of her car. “I’m proud of you,” her husband said. The woman practiced yoga, photographed the lake, and for some reason destroyed her life.

She lied. She stopped for drinks alone on the way home from work. She made secret trips to museums outside the city. She imagined herself in love with a coworker—a perfect, transcendent love, too pure for touch—and conducted an affair by text message. She felt that she was sixteen years old. The worst songs on the radio made her want to dance and also to sob with happiness. At night she did both of these things, soundlessly, in her darkened living room, while drinking the beer she kept under the kitchen sink.

All of these activities seemed quite harmless, like a vacation.

They made the woman's world bigger and more mysterious. Anything might still happen! When she walked around the yard with her child, she never felt—as her best friend put it—“trapped.”

A banal story, really. Of course her husband discovered everything. He was devastated, especially by the texts to the phantom lover. The woman cried and promised to reform. Incredibly, despite all her gifts, her intelligence, and her remorse, she was unable to do so.

Progress!

The German chemist Martin Klaproth discovered uranium in 1789 while studying a material called pitchblende. It was the year of the storming of the Bastille. *Liberté, égalité, fraternité*. A century later, in 1898, Marie Curie obtained radium and polonium, also from pitchblende. Today, Curie's notebooks are considered too dangerous to touch, but radioactive isotopes are used in smoke detectors, in agriculture, in medicine. During the Great Depression, lovely green glass colored with uranium grew so cheap they handed it out free at the movies.

The possibilities. Endless.

The “Radium Girls” poisoned themselves while painting watch dials with luminescent paint at the United Radium Factory. Unaware that the paint was toxic, they licked their paintbrushes to give them a fine point for outlining the tiny numbers and lines. Later, the women's bones decayed to a kind of moth-eaten lace. Their teeth fell out. As factory workers, when they wanted a bit of fun, the Radium Girls had painted their nails and even their teeth with the beautiful, ghastly, phosphorescent, futuristic poison.

Sometimes I turn my attention to my own body. I can feel that I am becoming increasingly toxic. Will I ever start to glow like the

Radium Girls? One of them, according to her lawyer, was luminous all down her back, almost to the waist.

I write by accident: *almost to the waste*.

But why panic? There's no going back. We are exposed to radiation every day. Our sun bathes us in ultraviolet light. All of us share in the toxicity that, thanks to us, characterizes our lifeworld.

I have seen photographs of the plutonium pellets in the vault, in their bare cell at the bottom of the containment center. They bask in their own lurid glow. Radiant.

All of us are toxic, I write to my hurt friend, *but some of us are more toxic than others*.

From her apartment in the city, my hurt friend replies: *Haha*. She tells me that she is reading Attar's *Conference of the Birds*. My friend is a great reader of spiritual and philosophical texts, which she passes on to me when she's finished with them. She is working on a new dance inspired by Attar. *That's great!* I write. My friend has not worked on a dance since her injury. *The dance is all in the fingers*, she writes. As if she has forgotten she doesn't believe in progress, she adds: *It will be my best work*.

There was a time when I would not have missed this chance to tease my friend on the subject of progress, but that was before I developed my current sensitivity, before I was able to feel the fragility of the earth, of the air, before I became a person who lies on the ground and weeps. I write simply: *I can't wait*. When I visited my hurt friend in the hospital, she looked like a broken, greenish piece of glass. It was thought she would never walk again.

Overwhelmed by life, she had walked out of her dance studio and gracefully, deliberately into the path of a car.

Later she would say to me: *Don't you dare.*

In the hospital, my friend explained that she had been feeling “trapped.” This feeling had grown in her invisibly, like radiation sickness. It was a relief, she told me, to have it out in the open. It was certainly visible there in her hospital bed. It was all over her skin, it blazed from her eyes. She was aglow with pain. I was shocked I had never seen it before—but, as I have already said, I was not very sensitive in those days.

The cheap green glass of the thirties, I recall, is known as “depression glass.”

How strange that my friend and I, who have always considered ourselves almost polar opposites, ever since we were promising teenagers of entirely different talents, have after all wound up with such similar fates! Like me, my hurt friend has had to switch careers. She now works from home, composing advertising blurbs. She tells me that the new dance she is making causes her immense pain. She quotes Attar: *Love loves the difficult things.*

The woman's husband: *You want everything to be easy.*

The woman lied and lied. Each lie, even a tiny one, seemed to open an alternate universe. At the lake with her child, she'd stare at a leaf or discarded candy wrapper. She had to keep reminding herself not to let the child fall into the water.

What is the half-life of a lie? Each one produced a chain reaction, an almost infinite amount of energy. The possibilities appeared endless, the future terrifying. Eventually, things reached critical mass.

The woman's husband hauled all the family suitcases into the living room. "Get out," he said. He whispered because the child was sleeping.

Isidor Isaac Rabi, who witnessed the first atomic bomb test explosion: "It blasted; it pounced; it bored its way into you."

The woman walked out of the house. She walked down the street. She came to a busy road. As she walked through the traffic, she thought of her hurt friend. Wind and horn blasts whipped her, but she emerged on the other side. When she told her friend, who was still in the hospital, her friend snarled: "Don't you dare."

The woman went to a hotel. She sat in the dark. Somewhere in the room, an animal kept making a small sound.

Rabi again: "It was a vision which was seen with more than the eye. It was seen to last forever."

There are certain things I miss, though I cannot bear to think of most of them. Occasionally I can bear to remember the voice of the loon. The loon has two calls. One of them, someone once told me, sounds like "the laughter of a hysterical woman." The other, the same person explained, is "the saddest sound in the world." In films set in the jungle, which call for exotic noises, the voice of the loon is often inserted, incorrectly of course, recognizable to anyone who knows.

Sometimes I feel like that. A voice inserted in the wrong place. A hysterical woman. Loony. Saddest in the world.

My huge glass cage, stranded in the middle of the wilderness, is, at least, an excellent place for screaming.

My hurt friend has a theory that tenders are the new priests, in charge of the soul of the world. The supreme irony of this.

J. Robert Oppenheimer: "The physicists have known sin; and this is a knowledge which they cannot lose."

Still, though I cannot think of myself as a priest, I am at least a hermit. A steward. I sit with the earth as if at the bedside of a sick friend. I am so tender now, I feel the earth's pain all through my body. Often I lie down, pressing my cheek to the dust, and weep. I no longer feel, or even comprehend, the desire for another world, that passion which produces both marvels and monsters, both poisons and cures. Like the woman in this story, I understand that there is no other world. There is only the one we have made.

Abba Moses: "Sit in your cell and your cell will teach you."

A child runs up to the glass. She stops a safe distance away and holds up a picture of blue and pink clouds. What does this picture reflect? It might be an afternoon's reading, a spoonful of ice cream, an argument with the world at the moment of sleep. The woman behind the glass is cut off from the complicated daily movements that make up the world whose surface is this picture. The paper is wilted from the child's sweat, which is made of water, sugar, salts, ammonia, and other elements, including copper, iron, and lead.

The child's perspiration is perhaps slightly toxic. The woman doesn't investigate; she cannot bear to sense the child's body. The child mouths "I love you." Her eyes are veiled. This is a routine visit to her mother; afterward, she gets to go to the pool.

The woman's hurt friend smiles from behind the glass. Before she takes the child away for the promised visit to the pool, she performs a few slow, aching beautiful gestures with her hands. She puts the child's picture into the transfer box along with a book.

The book is *Aurora* by Jacob Boehme, the sixteenth-century shoemaker who perceived the structure of divinity in the light on a pewter dish. Of *Aurora*, the deacon Gregorius Richter wrote: “There are as many blasphemies in this shoemaker’s book as there are lines; it smells of shoemaker’s pitch and filthy blacking.”

“Behold,” wrote Boehme, “there is a *gall* in man’s body, which is poison, and man cannot live without this gall; for the gall maketh the *astral spirits* moveable, joyous, triumphing or laughing, for it is the source of joy.”

Before I was a tender, I loved snow. I loved rainy windows that made my neighborhood look like a European city. I used to cut pictures of supermodels out of magazines and paste them in notebooks, arranged according to color. There were blue scenes that made me think of overnight journeys by train and yellow scenes that made me think of medieval bridges. Often I’d buy thrift store clothes and put them on without washing them, so that I could both feel and smell like someone else.