

## **All Those Vanished Engines**

**By Paul Park**

He said, “It’s hard to get the noises out of my mind, even after so long. It’s hard not to wake up with them, or hear them when I fall asleep. And in the time when I’m lonely here, it’s hard not to listen. I’m always listening. I hear a rattle, or a clatter, or the ringing of a phone. I hear the banging of a steel ladle on the lip of a steel tureen. When people speak, I hear the rhythms and ignore the sense. That’s partly because I’m old; I’m so deaf now. Sounds loom at me out of nowhere. I can’t distinguish the background from the foreground. Or else I hear sounds in my memory and not just now. Past and present in a kind of dissonance. And of course people say the same things to me over and over, over and over. They bend down over me as I sit here in this chair. You’re doing it now.”

This was true. On the other hand, he also was liable to repeat himself. He’d talk ten minutes and forget who we were, what we’d asked him. We’d have to begin again from the beginning. He’d say, “You hear the sound of a bell, or a bong, or a ringing in the night. Sometimes it’s real, and sometimes it’s a noise from inside yourself. Sometimes I’ll be dreaming of work, dreaming of the power plant, dreaming of North Adams in the old days, the hiss of the steam, the coughing of the cutoff valves, the whine of the generators, all the crashes and bangs. You’d step outside for a smoke in the middle of the night—we were working round the clock. But sometimes you could hear the sound of the radio playing, and even the water underneath the bridge. You’d stand out there on a summer evening and listen to the scrape of the locomotives as they made the turn after the long descent through the tunnel, the sound of the whistle and the crash as they let off steam. I remember the first diesels coming through. I knew I’d miss the old sounds then. I miss them now.”

His wheelchair was equipped with a small tray, and his spotted hand lay on it, grasping at nothing. The corded veins. He looked up at us, his blue eyes rimmed with red, and sightless of course, because of the accident. He had a long white scar across his forehead, half-hidden in his stiff white hair. He had a long jutting blade of a nose. He stared at us with his mouth open, and then reached up with his hooked forefinger into the roof of his mouth. We didn’t know what he was doing. But he was pulling out his bridgework, teeth attached to a pink plastic palate—he laid it on the tray. And then for five minutes or so he treated us to a variety of sounds, which he made by cupping his hands together in front of his mouth and blowing into the cavity he made, and then manipulating the shape of the cavity, fluttering his fingers to produce a tremolo. In this way he treated us to a small concert until he was out of breath, all the sounds of those vanished engines. For emphasis he would click his tongue against the roof of his mouth, making a variety of rhythmic knocks and snaps, loud and resonant because most of his teeth were gone.

When he was finished, he’d forgotten who were were. We reminded him that we wanted to learn about a project from his years at the power plant of the Sprague Electric Company during the war, a venture that lay hidden under the surface of the ordinary function of the plant, which involved the production of heat and power for that entire complex of old buildings. Elsewhere there were engineers working on a War Department subcontract for the Manhattan Project. This was separate from that and more secret still, because the science was even more uncertain, and the possibilities for success or failure even more extraordinary.

We said, “Why is it that the actual furnaces have been removed? Those three sets of condensing tubes, who has ever seen a system like that? And that enormous coal bin, as big as the hull of a ship, suspended overhead, fed by that long conveyer belt from the railroad siding—surely it’s impossible to imagine how such a structure could be supported in that way, by a network of such flimsy beams, if it were full of coal? We have studied the diagrams from the old Arnold textile mill, as well as Sprague’s original blueprints of the renovation. But many of those machines appear on neither set of plans.”

As we spoke, we could not fail to notice the ugliness of our words, not just in their accusatory nature, but in their sounds and cadences. The syllables rattled like a chain through a hawsehole, especially in contrast to the soft, whispered cooing that still flowed from between the old man’s hands. His blind eyes shone and glittered.

We had taken him to a gazebo in the courtyard of the nursing home, toward sunset of a summer day. Flies blundered against the screens. Somewhere, the sound of a whippoorwill. Snatches of music from the parking lot. Abruptly, a car horn.

“Did you see the garden?” he said.

We had seen photographs. Even now, outside the power plant, between the stone wall and the oil tank, there are remains of the triangular raised beds, the circular vents, suggesting a subterranean laboratory or storage facility, now filled in.

“Oh, it was beautiful,” he breathed. “Snapdragons as big as a man’s fist. Ladies’ slippers. Puff balls full of germs. Blossoms that used to pop when they opened.” He made a popping noise with his tongue. “Made you feel like a midget at the beginning of the world.”

We had no idea what that would feel like. We were more interested in the machines. “The flowers were so big,” he said, “they couldn’t be pollinated by ordinary insects.” He paused, then smiled. “One night I saw a moth with a ten-inch wingspan.”

We asked him why, what happened. We had tried to find out in other ways. But the information was still classified. He said, “You must be talking to me now because the rest are dead. Lacombe, Carusi, Niemeyer, Schwartz....” He listed some of the engineers.

“Yes,” we said, although it wasn’t true. Some had died, but some we’d been unable to track down. Some had disappeared under extraordinary circumstances. “Where did you get the raw material?” we asked.

Blind, he looked up at us, his eyes childlike and full of a moisture that was thicker than tears. In the gazebo, we listened to the buzzing of the flies, and the sound of someone shouting in the distance. We couldn’t quite make out the words.

He lowered his head, as if to examine the bridgework in his hands, the assortment of false teeth. “Brazil,” he mumbled finally, as if confessing to a crime that had been secretly a source of pride. “Rio de la Plata. Shiploads first, until one of them was attacked by the Graf Spee. The cargo didn’t allow the ship to sink, even though the hull was shattered by the 150 millimeter guns. At least until the...material, as you call it...dissolved in the salt water—you could hear the noise from miles away, like bubbles breaking. After that

they brought it up on boxcars from Montevideo. All the way to North Adams, all through the war. That's how big this was. We had priority all down the line."

We asked where they'd stored it and he chuckled, a dry sound, like crumpling a newspaper. But then it turned wet and ugly, a liquid, hacking cough. "You'll forgive me," he said when he could speak. "Fibrosis," he explained. "It's done for most of us."

We wondered if he had the strength to continue. He wiped his mouth with a handkerchief, and then laboriously replaced his dentures. "You'll forgive me," he repeated, his words immediately easier to understand.

He leaned back in his chair, and we wondered if he had the strength to continue. But now suddenly he seemed eager to speak. We thought he was amused by the tricks they had managed to pull: "We acted like it was coal," he explained, "even though the steam generators had already switched to oil—you've seen the tank. But the new deliveries, we acted like it was coal since it was mined like coal. We off-loaded it at the same siding in the middle of the night, and sent it up the same conveyor belt and into the same bin at the top of the building, which we refitted like you saw. None of it needed to be so heavy now. Mostly we had to keep the stuff tethered down. At least until we mixed it into slurry, it tended to want to float away. But we'd pump in the additives, which we'd manufactured on-site—you've seen the machines. The industrial noise was the easiest, of course, by-products of the whole procedure, which we re-gathered and combined. All those clanks, bangs, scrapes, and beeps. All those rattles, clunks, and hissing. The animal sounds were the hardest to generate. Niemeyer was our chief synthesist. Those were his machines in the southeast corner, nearest the river. All those clucks and bleats and barks, each one with its own little valve. He was like a magician down there. A little of this and a little of that. Me, I worked on the big systems. You've seen those ducts that led down to the furnaces? You think that was for coal? That whole divided sequence of gigantic cubes—why do you think they had to be so big? That was me. All those echoes and reverberations. We could increase the potency many times, even before it went into the fire. Then we had to rebuild the distillation cylinders, and did you see the tubes? Gosh, that was a beautiful system. It was like the pipes of an organ, once the pressure came up."

He was interrupted by another fit of coughing. Exhausted, he leaned back and wiped his lips. The fibrosis forced him to take quick, shallow breaths through his open mouth, and we could see his spotted tongue.

We also, on our first visit to the power plant at the MASS MoCA complex, had been amazed by the crowded ranks of condensation tubes. At moments, in the morning light, they had brought to mind various organic forms, undersea creatures perhaps, or else networks of blood-vessels and intestines. In the afternoon, when the shadows spread the other way, they had recalled hanging vines, and rows of columns, saplings in the forest glades. But as he spoke we imagined something different: sequences of pillars reaching up toward the roof, and the organ pipes of some enormous modern cathedral, where the consecrated images had been replaced with rusted, broken-down machines. A space that was sacred not just to the technological dreams of a vanished past, but also to the memory of a fatal yet carefully-suppressed industrial accident, and was at the same time appropriate to the complex's new function as a museum of contemporary art. Was it possible, we asked ourselves, to conceive of a way of bearing witness to this secret history, not through images or explanations, but through sound? After all, sound was what had animated the entire structure, in memory and in the actual past, and was still animating it, for example, right now. We thought these three locations—

in the past, in memory, and in the present—might find their representation in the three defunct and vanished furnaces in front of you, all in a row, and in the three empty cubes of space, all in a row, each one defined and encased with layers of rusted tubes.

“How did you find out about the flowers?” we asked.

He winced as if we’d prodded him suddenly. “A by-product,” he muttered. “An accident. You see on the left side of the building, near the bridge, there was a chute for the waste. Some of the effluent must have escaped around the bins. That was the first time we saw flowers that first spring—just there. Phlox. Phlox as tall as stalks of corn. After that we didn’t bother trucking any of it away. We just spread it over that whole section of the site, two feet deep, up to the stone wall and highway. We didn’t think there was any harm. It made it simpler for everyone. We didn’t have the permits anyway.”

For some of us the flowers were unimportant. But the rest of us couldn’t keep ourselves from imagining, in that post-industrial triangle of space between the Hoosick River and the stone battlements and the Route Two overpass, a temperate jungle of enormous blooms, grown in an accumulation of humid slag from the distilling cylinders, and then nourished, especially at night-time during the long, hot summer of 1944, with the breath of sonic fertilizer wafted out of pipes from underneath the ground, spraying back and forth like a system of acoustical sprinklers, creating mixtures of unintentional music, especially where the zones overlapped. We imagined the competing layers of sound, rising and diminishing in volume, revealing as they did so the swell of the underlying bass. And surely we were helped in our imagining by where we stood in the gazebo in the open courtyard of the nursing home, surrounded on three sides by the building itself, and beyond it the street and the parking lot. Even here we could listen to the rolling wave of noise, the car sounds and the honking and the squeak of brakes, giving way gradually to the coughing and the grunting and the subdued speech and the cries of encouragement or despair. But then on the fourth side, beyond the gazebo and a low fence, the property gave out onto the wetlands, a triangle of cat-tails fed by a small brook, and beyond that a line of willow trees, and beyond that fields of the high grass, and the mountains beyond that, and the high altostratus clouds, and the cumulonimbus clouds that darkened the horizon, and brought the thunder and the summer rains. Even here we could listen to the overlap, and the layers of sound rising up to heaven. We could scarcely imagine what it must have been like in the garden outside the old power plant, where the flowers themselves put out a radiance of noise against the thudding, whistling, squeaking, hissing background of the machines.

But some of us were more pragmatic. “What was it for?” we asked.

And the old man smiled up at us, listening, perhaps, to the lazy buzzing of the flies. He himself, at that moment, seemed more a machine than a man, an ancient, decrepit, obsolete machine, starved of fuel and oxygen, yet still shuddering, still alive. We were aware of the scarcely-inflating bellows of his chest, the soft, thin, shallow puffs of breath, the occasional soft farts and grumbling. We were aware of these noises, in him and then a low small echo in ourselves.

He smiled, and opened wide his cold, blue, sightless eyes, rimmed in unhealthy pink, wet with rheum. We admired the scar on his forehead under his white hair. “Well, there were three separate grades,” he explained patiently, as if to children. “The first was an industrial grade, very coarse and rich, which we shipped to manufacturers all over the east coast. And the second was highly-distilled, a luxury product,

mostly for export even then—or at least that was the idea. No one had the money for it, of course, not during the war, or for a decade afterward; we stored it in canisters under pressure, all those soft, pretty sounds. One of our technicians had synthesized the high notes of a glass harmonica, which he had mixed with the fluttering of a warbler's wings, and the rustle of a lady's silk, lilac-colored petticoat in the early morning—you could see this was a specialty item, very costly and rare. But the third type, well, that was the secret, wasn't it?"

He paused, cleared his throat, coughed some sputum into his handkerchief. We watched the pulsing skein of blood-vessels under his translucent skin, the webs of veins on the backs of his hands. He said, "You know up at the top of the hill, there was a foundry that made steel plates for the Monitor during the Civil War. And Sprague Electric had a contract for the switches on the first atomic bombs. This was like that—weapons grade. We had sounds that could break glass, even at low volume. With the refinements and additives, it would turn concrete to sand. You could put your thumb through a two-inch steel plate, after it had been permeated and submerged in one of the acoustic vats. That was the theory, anyway. Plans look good on paper. And we were working double-shifts, around the clock. This was in the spring of '45. You'd think now we could have predicted that the war was almost over. You could have thought we could relax, work on civilian applications. You could use the stuff to power anything in the right quantities. Generators, rocket fuel—Carusi was in charge of that. Years later he was still working. But none of the rest of us were thinking about those sorts of things. Even after Hitler gave up, we were working harder than ever. The entire plant was like a single machine. But then Gustafson got the idea of a new additive, a new sonic overlay. Just one new set of valves. Just a few decibels—I won't tell you what it was, or how much, or what proportions. He blew the roof off when the sound ignited. A plume of fire in the night sky. It was four a.m., the morning of April 29<sup>th</sup>. It had been a big week, and I was outside smoking a victory cigarette. A Lucky Strike. I looked up and saw a jet of flame licking the underside of those low clouds. I don't even remember hearing any noise. That fire was the last thing I saw, and the clouds above it. The last thing I saw. Something hit me between the eyes. And that was that."

And that was that. We also had wondered about civilian applications. But it was too late to think about what those might have been. After the war, people patched together the old generators and went back to making steam and power. Later still, the whole site was abandoned, the tanks and valves left to rust under the ruined roof. Open to the stars and snow and rain.

And the blind engineer, we guessed, had also found himself abandoned, his own motors extinguished or removed, his own internal conduits left to atrophy and decay. Later, when we returned to the museum and stood among the ganglia of tubes and valves, we could not but recall his vacant face as he looked up at us, transfigured and yet deflated by the pressurized escape of his own memories, which drifted like dust or flakes of rust around us as we watched, and he lay back in his wheelchair and fell asleep.