

# Maker Messiah

by Ed Miracle

## Prologue

BATTLE MOUNTAIN, NEVADA. THURSDAY, APRIL 4. ADVENT MINUS SEVEN YEARS.

Philip Machen sat on a rocky ledge of the great Nevada nowhere and turned up the collar of his peacoat. Since midnight, a bully wind had dashed fat clouds against the mountain, smacking the lightning out of a few but releasing no rain. Beyond the glow of his computer screen, the tempest howled, impatient and buffeting. A dazzle flashed and was swallowed by darkness, as time had swallowed his moments.

*Just because your math is solid doesn't mean you can do this.*

Philip nodded at the memory of his father reading his son's precious equations and not seeing what they really meant. Leonard Machen, part-time philosopher, full-time math teacher, should have helped him back then, but he died a week later. *Dad should be here too.*

Across the sandstone ledge raced a four-legged skitter.

"I have a secret," Philip called after it.

The skitter stopped, terrified by his voice or puffed with reptilian contempt. *My rock.*

"Okay," Philip said. "But we're in this together, Old Shoe, live or die."

The lizard responded with push-ups. *My rock.*

Philip tossed a pebble at it. "Take cover, pal"

Because it was time to poke the universe, to push the big red button and shatter his stuckness. The blast he was about to unleash might vaporize half of Nevada. Or collapse to a singularity that would burrow through Lander County and devour the earth from beneath his feet. What a vision that would be.

His equations predicted three mutually exclusive possibilities; one would kill everything for five

miles around; one would swallow the Earth before plunging its remains into the Sun; and one would change the world forever. So his hopes for the evening—perhaps his last—lay in the third prospect. If that outcome prevailed, his moments would continue, and the lizard could keep its rock.

Should the attempt fail, however, if the blast produced noise and debris but no quantum effects, his future would die with the echo. Then he would erase his equations, expunge them from every medium, and dispose of himself. Without a way forward, there could be no advent, no Philip Machen worth keeping, and stuckness would prevail.

The sky flashed again, bright and close. He poised a finger over the icon on his screen. Tonight he would succeed for all time or fail forever. Thunder cracked and rolled away. His flinch sent the signal: Begin, begin.

Half a mile north, at the bottom of a deserted pit mine, a circuit closed and two cylinders the size of rail cars detonated. Shock waves imploded the carbon sphere stationed between the cars, as flash channels pumped gamma rays into its collapsing heart. For a fraction of a second, pressures and temperatures exceeded those of the solar core. The genius part came next.

Seeded by a gumball of depleted uranium, and charged by intense radiation, nuclear reactions multiplied the forces, generating quantum fluctuations at their center and forming not one but two entities never observed in nature. Microscopic and invisible, separate yet coupled, these quantum effects should have flashed to pure energy in mutual annihilation or collapsed to a singularity that would destroy the Earth. Yet they could not. Conforming to fractal twists of space-time inherent to their ten-dimensional geometries, they embraced ferociously, but could not merge. They whirled mightily, but could not escape. Hyper-geometrically, each entity fell continuously through the other. While their frantic tango consumed just enough mass to make up for dimensional boundary losses, as Philip predicted. In twelve milliseconds the imprisoned pair became the first quantum duplex.

The flash from its birth turned the desert wedding-cake-white, brilliant even through closed eyes. His rocky ledge heaved Philip off balance, while stones and dust rained from above.

*Holy shit.* Not his favorite expression, but . . . *Damn.*

When he could see again, the ruckus had stolen his laptop, abducted it down some crevice, though there was no time for a search. If the duplex had formed as he hoped, they needed to stabilize it right away. He had plans for that, but the darned thing might wink out of existence before they reached it. Or explode. Quantum freaking dynamics.

He brushed his coat, buffed his scalp, and hurried to the tow truck. Tanner and Uncle Orin would drive their rig down from the west rim, while he would enter from the south. If either access was blocked, they hoped the other would remain passable, and that the duplex would not be too heavy, or too radioactive.

An icy dawn was blotting shadows from the mine when they unearthed the product of their labors. Centered on the steel crash plate intended to support it lay a crystalline lump of diamond the size of a tennis ball, a perfect jewel-cradle for the newborn duplex. Its radiations were low-level betas, no gammas or neutrons, so Philip laid a cable mesh beside it on the plate. Then his uncle and his best friend helped him lever the glassy black sphere onto the mesh. As they hoisted it clear, a strain gauge rendered a verdict: 717 pounds.

Philip stopped the winch and sank to his knees. Swaying at the end of a taut chain, the black diamond's unnatural mass affirmed every lonely moment he had endured to create it. From the exhausted grip of what must be, he had prised the first breath of what could be. Tonight was not an irrecoverable end. It was the beginning for which he yearned. His equations worked. Their possibilities had beaten their probabilities, and his duplex was no longer a mathematical curiosity. It was here. It was real. It was his.

One touch of its obsidian face and the anguish of his twenty-seven years sloughed away. He inspected the veins of his hands, as he had the night his family was murdered. Flesh and bones are made of stardust his father used to say, from thirteen-point-seven-billion-year-old protons and electrons, bequeathed to us through our parents' love.

No matter what lay ahead for him now—destruction or glory—he had confirmed his vows and bound himself to their consequences. There could be no turning back. He straightened and stood. If success were the best revenge, his would be perfect. Lizards, especially, would be amazed.

## One

SEVEN YEARS LATER, TRACY, CALIFORNIA, SATURDAY, APRIL 18. MAKER ADVENT, DAY ONE.

On the night of Philip Machen's world-wide announcement, twenty-two-year-old Everett Aboud threaded his motorcycle between the ranks of taillights descending herd-like into California's Central Valley. The herd bunched and surged as Everett passed among them, numb to the cold, yet hyper-alert. One distracted driver might cancel his choreography, but splitting lanes on his way home from work was the best he'd felt all day. He was making thirty-miles-an-hour, versus twenty for the herd, eastbound over the sagging shoulders of Altamont Pass. Eight more miles in fourteen minutes brought him to a swath of tract houses, tile-roofed kudzu spreading outward from the old valley town of Tracy. Then finally home to a peeling white clapboard he and his father rented in a neighborhood of tall trees, wooden porches, and detached garages.

He parked beside the sentinel of their barren flowerbeds, a stone-quiet Powerpod. Waist-high and loaf-shaped, the white, ceramic monolith could have formed the base for a monument or a statue. Except for three saucer-sized disks bolted to its front, its back, and its top. Moisture dripped from the eaves overhead, emphasizing its silence.

Everett stretched and flexed, removed his helmet, and shook out his ebony hair. Johnny Mathis on a motorcycle, the boss' wife had called him this morning. A singer, not a biker, he learned, so he took it as a compliment. He might resemble someone who had actually made a difference.

He stomped through the back door into a stale potpourri of cigarette butts, gun oil, and powder

solvent. Used cleaning patches littered the kitchen counter between two antique revolvers his father, Bobby, never fired but had lately been trying to sell. In the living room, Bobby was collecting dead Budweisers from the sofa. He wasn't drunk, but the smell was on him. The first time too many Budweisers had punched Everett in the mouth, ten years ago, was the start of him calling his father Bobby instead of Dad.

"There's a guy coming from Stockton tomorrow about those Colts," Bobby said. "And I made a hundred dollars lumping furniture for Dario."

"That'll help." Everett peeled off his riding leathers and hung them in the laundry. "General paid me in cash."

His father, clad in habitual denim, came into the light. "I should go over there and thank him personally."

This was Everett's first week at General Johnson's Shoes-for-You in Oakland, a forty-eight-mile commute from Tracy. The job was temporary, but with the rent due Tuesday, he and Bobby needed the money.

"Remember that hulking box of parts we got?" Bobby opened the refrigerator and removed two bottles. "The junk that Powerpods Company has been sending to people who didn't order it? They're making an announcement tonight on the internet. Supposed to be a big deal."

*Why would anyone care?* "Spaghetti all right with you, Pop?"

"Sure." Bobby decapped a beer and sipped. "You want to watch the announcement?"

"I need to check my email." One of his long-shot resumes might snag another interview.

Bobby shrugged, held out the second bottle.

"No thanks," Everett said. "I'm flying tomorrow."

"Did you get a charter?"

"Just an hour with a student." For which he might clear thirty bucks. He moved past Bobby to the drawer where they kept their cash. He fished his wages from a pocket and stuffed all but a single

twenty into the rent envelope. “We’re two hundred short.”

Bobby nodded, cleared his mess from the counter. His thick gray mane shifted against his collar as he dumped an ashtray. Smoker’s wrinkles like Bobby’s would never crease Everett’s face, and he hoped to stay as trim and muscular when he reached fifty. But it was clear his father’s fate could easily become his own, lurching from one shaky, no-benefits job to the next, reduced to odd jobs and day labor. It wasn’t supposed to be this way.

Flying was supposed to be a career, not a supplement. Three years ago, Bobby sold his heating and air conditioning business in Oakland and moved inland for the lower rents, just to finance Everett’s dream. But the investment wasn’t paying off. More than a year had passed since Everett graduated from an expensive flying school in Florida where he flew every day and loved every minute. Except for seaplanes and jumbos, he could pilot anything with wings. Yet flying jobs were as scarce as others, so he took students and occasional charters from the service at Stockton. Between engagements, he launched resumes at every airline and charter outfit in North America and rode long distances to interviews that came to nothing. Probably because his name—*Aboud*—remained suspect, automatically an Arab, potentially a terrorist, even though he was third-generation Lebanese-American, not a Muslim. At least tomorrow the automatic Arab could fly.

Bobby set the table then switched on the wall screen. “Here we go.”

Up on the screen, a sturdy blond teenager strolled through a rose garden wearing a sleeveless yellow blouse and a cheerleader’s grin. She approached a familiar white boulder the size and shape of a steamer trunk: a Powerpod. Six years of upbeat marketing and they still looked like tombstones.

“We have exciting news for all Powerpod owners,” she said.

Everett filled a saucepan with water and set it on the stove.

“A new paradigm that will change your life.” Nothing to buy. Blah, blah, blah. “You must see Philip Machen, Saturday, April 18, at 9:00 p.m. for the most amazing demonstration of your life. Got power? Get Powerpods.”

A countdown clock appeared at the corner of the screen, while Mock-en rattled through Everett's head. Philip Machen, the millionaire inventor of Powerpods, never gave interviews, never spoke publicly. When President Washburn hung that medal around his neck last year, the guy said, "Thank you," then returned to his cave, or wherever he lived, a place the paparazzi with all their cameras could not find.

The screen displayed PhilipMachen.com and played elevator music, which Bobby muted. "Ten minutes to go," he said.

Everett boiled water and fed noodles into the pot. *How could a stupid commercial change anything?* Into another pan, he stirred red sauce with a wooden spoon and tasted it—tomato, basil, oregano.

"So what do you think, Son?"

"Who cares?" More than fatigue weighted his voice.

"You know," Bobby said, "we can make it on day-labor and help from friends like General Johnson, but not if we had to pay for electricity. Having that Pod is saving our butts."

"You were afraid of them."

"Yeah, there's something weird about sucking electricity out of bits of tap water," Bobby said, "but nobody's getting zapped or polluted. If the rest of the world worked as good as Powerpods, we wouldn't be stuck in this damn recession, that's for sure."

Everett dumped boiling noodles into a colander and hoped Bobby wasn't warming to a Dad-lecture. Bobby lived in a world of manifest duties and summary order, from which he imparted his judgments, no extra charge. Everett ladled sauce over a plate of noodles.

"Here you go, Bobby."

As usual, they ate in silence, until the screen came back to life and Bobby un-muted it. Everett expected another episode of the Powerpods commercial, featuring a guy cutting a Pod in half with a giant chop saw to prove it contained nothing hazardous. This time a smooth-faced white guy with

skinny arms and wispy blond hair gazed at them, eager to begin. His flowing white shirt stood open at the collar, sleeves rolled—a pale academic trying to look manly. Except for his eyes, which seemed to draw the light out of the sky and reflect it back, brighter. Ghosts would have eyes that gray.

“Hello. My name is Philip Machen. What I am about to show you is going to change your life, and mine, forever.”

“See,” Bobby said. Everett stabbed the last of his noodles.

“In this introduction, I will show you a Maker and demonstrate it. In the next segment, I will show you how to convert your Powerpod into a Maker, to begin making things you need or enjoy.”

Everett carried his plate to the sink.

“In later segments . . .” The ghost cleared his throat. “I will describe some of the changes we can expect Makers to bring, and why you should use your Maker to secure your family in a new and universal prosperity. My webpage and the free Cambiar internet phones I sent to every Powerpod owner contain complete documentation, including a Maker guidebook.”

Infomercials sucked, but a movement caught Everett’s attention.

A darker man with hairy arms rolled a Powerpod, still on its delivery cart, to Machen’s side. The modifications were bizarre. From the Pod’s two broadest sides and from its top, fluted metal cones protruded at right angles. About a meter in depth and diameter, each jet-black cone tapered to a saucer-sized flange, bolted to the Pod. Hinged metal doors covered the wide ends of the cones. Stadium speakers, it seemed, sprouting from a fat, white tombstone.

“This is our prototype, the world’s first Maker. It makes perfect duplicates of anything that fits into its chambers.” Machen smiled like a kid with a frog in his pocket.

Bobby blew across the top of his bottle, producing a soft hoot.

“Big deal. It’s a 3-D printer.”

Everett waved for silence. This wasn’t the usual Powerpods spiel. On-screen, the hairy arms passed a garden hose to Machen, who lifted a top-cone cover and directed a stream of water into it.



“Any material which fits in the upper chamber can be used, but water may be the handiest. Consider this water to be the raw material from which you will make your copies. Your raw material does not have to be water or even a liquid. It could be any sort of scrap, from lawn trimmings to sewage, to common dirt. The imperative restriction is that the mass of the raw material in the upper chamber must always be greater than the mass of any item you wish to copy.”

“Mass?” Bobby peered down the neck of his bottle.

Everett snatched the remote and increased the volume.

The upper cone overflowed, splashing Machen, who ducked too late and threw the hose aside. He opened a side-cone door. The camera zoomed to reveal a wire shelf spanning the interior. Machen unclasped his wristwatch, held it to show a twitching second hand, and laid the watch on the shelf.

“Place your original item in one of the copy chambers. It doesn’t matter which side, except the opposite chamber must always be empty.” He shut the door and reached between the cones to the Powerpod.

“Then you press the green button.”

Hairy Arms retrieved a second watch from the opposite chamber, while Machen removed his original. They held them to show identical straps and faces with perfectly synchronized minute, hour, and second hands.

Everett stared. *How could this not be a trick?*

“You may copy anything that fits in the chambers,” Machen said, “so long as there is sufficient raw material in your upper cone.”

Hairy Arms brought out an old-fashioned, boom-box stereo. One arm steadied the box on a table while the other pressed a running circular saw against it. With a whine and a screech, it lopped off a jagged corner, leaving the case splintered. Hairy placed this wounded artifact into one of the cones and shut the doors.

Again, Machen pressed his button. The emergent stereos were identical in every visible respect

including their ripped edges.

“Wonder how they do that,” Bobby said.

Everett shushed him. If anyone could do the impossible, it would be the guy who had already conjured electricity from artificial boulders.

Next, Machen and his assistant copied the circular saw, followed by a baguette of French bread, a plate of fish, and a wicker tray of fruits and vegetables. Holding up a tiny white speck, Machen waited for the camera to focus on it.

“From a single grain of wheat or rice, anyone with a Maker can feed a city. Copy one grain and you have two. Copy two grains and you have four. Within an hour, you could fill a truck.”

Machen produced a toad in a red-wire cage and placed the cage in one of the cones. A close-up showed the amphibian panting and blinking.

“Never,” he said, “never try to copy a living animal. This means *any* animal. Your Maker will kill it.” He pressed the button. Two cages emerged, each containing a collapsed, motionless toad.

“At the molecular level these toads are identical, but they are both dead. Nothing with a nervous system can survive duplication. If your children try to copy a pet, the pet will die. This is very important. Children must never play with your Maker. In particular, they must never play hiding games in the cones. Maker cones should be locked shut when not in use. Please be careful with living things.”

Everett’s stomach churned.

“Duplicate toads,” Bobby said through a belch. He held his bottle at arm’s length, swirled it by the neck. “Didn’t think I drank that much.”

Machen strolled to a bigger Maker. This one’s side-cones exceeded his height, and the towering top-cone, supported by steel struts, cast a shadow. Nestled between the cones, a central Powerpod was jacked waist high.

“As you can see, larger items may be copied by extending the size of the chambers. Among the first things you will want to copy is a friend’s Powerpod, along with the cone segments he will need to

turn it into a Maker. Copy as many Pods and cones as you wish, and share them with your friends. Ask them to do the same. In this way, you will help ensure that everyone who wants a Powerpod or a Maker will have one. It will cost you nothing but the effort to do it.” He backed from the machine and faced the camera.

“Then together, you and I will eliminate poverty and scarcity for all time.”

Everett froze. His limbic brain, beneath the conscious one, locked every motor impulse against a tectonic shift that it alone detected. Hairy Arms rolled a second Powerpod into view, and Everett held his breath. The narration faded. Hairy jacked his Powerpod chest-high and set a bridge into one of the big side cones. He aligned the rails and shoved a twelve-hundred-pound Powerpod into the chamber. Only when Machen leaned between the struts to press his green button did Everett breathe again. Thump, a boulder falling on moss. Then Machen and his assistant extracted two identical Powerpods.

Everett stood. “If that thing is real . . . .”

Machen continued, his ghost-eyes blazing.

“Just as a lens splits and rejoins patterns of light, Makers split and rejoin patterns of mass and energy.  $E=mc^2$ . The mass-equivalent energy of the item being copied is drawn into folded dimensions within the machine where an equal mass-equivalent energy is drawn from the raw material in the top cone. The Maker splits these energies between the two receptor chambers to form perfect duplicates—all in the wink of an eye.

“While a full description of this process requires some advanced mathematics, I assure you there is nothing mystical or supernatural about it. It only looks like magic.”

His half-smile blossomed into a grin.

“Makers are not about making more stuff. They are about getting stuff out of our way. As Maker owners convert their goods into free commodities, they will free us to focus our compassion and humanity on improving the world. For the first time, Makers will allow us to—”

Everett wielded the remote to skip the baloney. “Where’s the part about setting it up?”

“You going to build one?” Bobby set down his bottle.

Everett found a menu and clicked *Assemble Your Maker*. A training video commenced, and they viewed the first part, learned how to attach the cones. When the voice went on about extending the cones to build a larger Maker, Everett switched it off.

“Do we have—”

“Still in the crate, behind the garage.” Bobby spoke with his fist against his mouth. “I was going to throw them away.”

Everett strode toward the door, and Bobby rushed to catch up.

“Do you suppose this thing is for real?” Bobby said. “I mean, if we can copy the copy machine, how will that guy make any money?”

Everett stopped to glare at him.

“Bobby, nobody’s going to make toads or wristwatches.”

“Holy cow.” Realization flowed into Bobby’s rheumy eyes. “Everybody’s got one, everybody’s going to get one, and everybody’s going to make . . . money.”

They unpacked the parts and lugged them to their Powerpod. Working in the glow of a fluorescent drop light, they assembled and attached the small cones, then filled the top one with water. First, they tried Bobby’s wallet.

When Everett pressed the green button, the machine thumped softly, and the house lights blinked. As the drop light flickered back to life, he extracted two identical wallets containing duplicate cards, identical driving licenses, and two wads of currency. They sat on the damp grass, comparing Federal Reserve Notes: three sets of fives, a pair of tens, and a pair of twenties.

After a moment Bobby couldn’t decide. “Which are the real ones?”

Without a word, Everett got up and slipped into the house. He returned with Bobby’s favorite pistol—a semi-automatic, still in its holster—and stuffed it in the machine.

“Stand back, Dad. It might cook off the ammo.”

Bobby scrambled as Everett pressed the button. A louder thump. Again the lights blinked.

Identical holsters and pistols emerged, right down to the worn bluing, the scratches, the serial numbers.

Even the smell. Disbelieving, Everett hefted one in each hand.

“Son . . . of . . . a . . . bitch.”

Then Everett Aboud, the automatic Arab, pointed his father’s pistols at the lawn and pulled both triggers. The double blast woke every dog in the neighborhood.