

Fire and water must live together
a novella, with an afterword addressing its critical framework

by

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Abstract

By the year 2037, climate change has destabilized the world's ecology, politics, and culture. Hawaii has seceded from the United States, instituting the Cultural Reaffirmation, which champions a sustainable, traditional way of life. Eenie is an astronomer on the Big Island of Hawaii. In order to keep the observatory on Mauna Kea operational, she must appease the newly independent island nation by reenacting a mythical sled race between Poliahu, the Hawaiian snow goddess of Maunakea, and Pele, the fierce goddess of lava, personified by a rival geoscientist from Maunaloa's volcanic laboratory. Once an Olympic contender in the women's luge, Eenie has won this race twice before. This year, though, the greenhouse effect has caught up with her; there is no snow on Maunakea. Without it, she cannot prevail, and if she doesn't, the priests of Hawaii's Cultural Reaffirmation will pull the telescopes down from their most sacred mountain. Eenie struggles against nature's increasing wrath, gods, monsters, pigs, and political rivals, though her biggest struggle is within herself.

Fire and water must live together takes place in an ecodystopic future, though its story pulls from Hawaiian myth. The story's projection into the future is based on current events, including the Hawaiian sovereignty movement, climate change science, and technology. An accompanying essay frames the novella through three critical lenses: ecocriticism, eco-politics, and post-colonial hybridity. The essay includes a focused look at the setting of Hawaii as it stands today in terms of environment, politics, and people.

Table of Contents

Acknowledgements.....	v
Dedication.....	vi
Chapter 1 - kudzu queen.....	1
Chapter 2 - the warthog.....	8
Chapter 3 - fine, white <i>kapa</i>	14
Chapter 4 - messengers (<i>na 'oumuamua</i>).....	18
Chapter 5 - power trip.....	26
Chapter 6 - <i>holua</i> time.....	36
Chapter 7 - old man trees (<i>na lā'au kanaka kahiko</i>).....	43
Chapter 8 - Volcano (<i>lua Pele</i>).....	48
Chapter 9 - the hard rain (<i>pa'akiki ua</i>).....	56
Chapter 10 - devil's throat (<i>ka 'ā'ī kiapolō</i>).....	60
Chapter 11 - Saachi.....	67
Chapter 12 - in the <i>kipuka</i>	73
Chapter 13 - fallen arch.....	84
Chapter 14 - the consort.....	94
Critical framework: the point of fiction.....	100
Ecocriticism.....	102
Eco-cultural politics.....	103
Hybridity.....	104
Hawaii today.....	105
References for Critical Framework.....	110
Appendix A - Reading List.....	112
Literary Influences.....	112
Criticism.....	112
Writing and Background References.....	113

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Dedication

This manuscript is dedicated to my family, teachers, and supporters; to indigenous populations around the world struggling for survival and self-determination; and to future generations that must find a way to live with an increasingly hostile planet. I hope everyone finds a niche that sustains them.

Chapter 1 - kudzu queen

The sign over the door used to say The Poi Poi before the *lehulehu* ripped it down and threw it into the lava vents of Pu‘u ‘Ō‘ō, along with all the other *haole* tourist garbage in Volcano: garish toy hula dancers on suction cups, limp plastic grass skirts, fake leis, crab and turtle effigies made of googly eyes hot glued to coconuts and shells, puffer fish urethaned in permanent surprise, neon airbrushed wall art of surfboards and sailing knots and sea turtles, florid wraps and skirts and shorts, all of it China toxic, China cheap. Hawaii wasn't going to be part of the economy of the white devils anymore; the Reaffirmation got that right, at least.

With the sign gone, Eenie had no idea what the name of the bar was now, or even if it had a name. Nobody in there would tell her – not the owner, originally from a small island near Okinawa, nor the waitress, his half-*Kepani* daughter. Certainly not the three white-haired ‘*elemakule* sitting together at a table close to the bar, the normal early afternoon traffic. The old men muttered to each other in the half-English pidgin everyone had used back before the public schools had all been replaced with *kamehameha*. The kids spoke full Hawaiian, but even with years of tutelage, Eenie hadn't been able to pick it up.

The waitress would serve her, however. She dropped off another mango, collecting the empty Eenie'd slid to the edge of the table, while avoiding looking at Eenie directly. Eenie reached over the table's thick resin top, yellowed with age, spread over artifacts from a different time: postcards of Technicolored muscled men and lily-white hula dancers with coconut bikinis, tourist maps from like 1965, menus from places long since gone, their names absurd, their prices in Merican money. There was even a bicentennial quarter in there. The big kahunas of the Reaffirmation had tried their best to erase Merican influence, but they'd never get it all.

All of the *kanaka* – authentic Hawaiians – and Polynesians, and a fair number of Japanese, like the bar's owner, wouldn't acknowledge Eenie in her training clothes, or regular street clothes, much less talk to her. Eenie was incognito, the closest thing to being anonymous she could experience on the Big Island. At this moment, being invisible felt just fine. She needed this, needed to check out. She opened a link to Paul, hoping he'd be able to talk. She sipped her juice while she waited to connect. The flavor reminded her of pawpaw, which she and her brother and sister used to pick wild in the woods around their house in Kentucky.

Paul looked good on the vid. He must've been in the sun a lot recently, his face burnished, his hair bleached to a ruddy auburn. The humidity of the South China coast had steamed a permanent wave into his normally straight hair. He looked good.

The piers of the bridge Paul had engineered were in the background, marching across to the far side of Shenzhen Bay. They were completely different from any engineered thing Eenie had ever seen, more like something lobsters or hermit crabs would come up with, or aliens. He'd been on site for weeks, crawling around, in, and on the knobby vertical structures, verifying growth rates and benchmarking interval structural integrity. Paul's camera was good enough to capture the closest pylon in detail. It looked vaguely anatomical, blotches of green and dark red material glommed together in no apparent pattern, everything covered with a shimmery, calcified glaze that reminded Eenie of abalone. It wasn't constructed, Paul had told her, but accreted, grown from the sea, like shell, or coral. A living thing, almost.

It would keep growing even after it was in use, Eenie remembered him saying, back when she had visited him years before, growing stronger under loading, like muscle or bone. Maintenance crews would have to trim the bridge stuff back so it wouldn't callus over the roadway.

He was talking to her, but her brain wasn't engaging. Couldn't keep up.

"It's gone," he was saying. He'd already said it twice.

"What? What is?"

"The house, Eenie. It's gone. The kudzu got it," Paul said. "Didn't you get the images?"

"Uh, probably." Eenie hadn't opened the message. "It's really gone?"

"Yeah," Paul said. "Everything on your side of the Ohio."

Her stepfather's house. Crushed. Swallowed. The kudzu. Paul had visited Tell City, right across the river, a month or two before, and had gone across the old iron bridge to Hawesville. Eenie's side.

She knew that kudzu. She and Paul both did. It had been a fairly large patch back when they were kids. That summer when she'd turned eleven they practically lived in there, along with Luke and Kal, Eenie's younger brother and sister. It had been hot, that summer, so hot, the hottest til every summer after, but cool under the vines. She remembered how easy it was to climb through them. They burrowed through, really, like earthworms, the vines were so dense, went as high as they wanted, no possible way to fall, up to the tops of the oaks and laurels and walnuts, all bent and twisted by the strangling, foreign weight.

Only Eenie could get all the way up. Kal, her stepsister, was small and light, but too short to reach as the kudzu vines thinned towards the top. Luke, half-brother to them both, was too heavy. Paul didn't try too hard, more interested in a spot where he could squirm over on his back and hammock himself. He would look up at Eenie overhead as she struggled for the surface. Only Eenie could make her way to a bowed treetop and stood where it arched, feeling tension pulsing through its strained fibers in the balls of her feet, the creaking and straining thrumming up through her, and peek out over the top of the kudzu. The wind pushed the blanket of green

leaves, bright green, green like nothing else in Indiana. The seamless foliage of kudzu leaves moved like the surface of an ocean. Up there the only thing the kudzu had to fight was itself. Every time a runner pushed up higher than the rest two more would reach up and pull it back down, drowning itself as it reached for the sun. They'd called her the kudzu queen.

But now, Paul was saying, the kudzu had swallowed her childhood home.

"I sent you some images," Paul said.

"I can't," she said. "Not now." The last thing she needed was more depressing news.

"Where are you? Can I see that?"

"Oh, sure," Paul said. He flicked his hand, and the camera swung away from Paul, pulling far enough back for Eenie to see the busy landscape behind him. Paul leaned to his left to clear the frame. She could see the water, the big automatic ships, and the green of Hong Kong Island in the distance. Just behind him was one of the piers of the new bridge. It was closer than she'd thought it would be.

Definitely on the Shenzhen side, she thought. She recognized the view.

"Wait, is that..." she said. He smiled in delight.

"You got it. The world's tiniest tea shop."

Where he'd taken her, two years ago. She'd gotten permission from the Reaffirmation to attend a conference, and detoured to visit him. Her minders hadn't objected, or if they did Haru, her ally in the Reaffirmation, had quashed their indignation.

She remembered the place. The little tea shop had been pushed to the edge of the land by teeming Shenzhen, cartoonishly small, crammed in between a brightly lit store stuffed full of electronics with arcane Korean names and a place that might have sold, or possibly just

displayed, Animist trinkets. Just two stools right up against a counter no larger than two of the TV trays they used for dinner back at her stepfather's house.

Inches from the edge of the counter tiny cargo trucks whined up and down the road between the line of shops and the rip rap along the bay shore. Swing your feet out too far and you'd kick the truck drivers in their faces.

"Remember the trucks? How close they were?"

"Oh, yeah. Look!" Paul swiveled the camera. A red truck pattered by, no bigger than a golf cart. On its back, a tall open cage, filled with hundreds of doll heads, female, Caucasian, blond-haired. Out in the bay, fully laden container ships were being pushed out to sea by tiny pilot boats, just like they had when she visited.

In the bar, her fingers laced around the cold mango, Eenie closed her eyes, remembering. She and Paul had sat in the shop drinking tiny tea until evening lowered over the bay. Paul talked first about his bridge design. Then the old days. Then quiet between them, to Eenie peaceful as the Perseids, as familiar, as Shenzhen rumbled around them, and the sun extinguished itself. It had felt good, to be somewhere else, away from her responsibilities.

Tiny lights glinted in the crook between two splayed ridges, across the bay. Villages he told her; traditional, hundreds of years old, dozens scattered across the near side of the peninsula, farthest away from Hong Kong proper. They were small, quiet, even then barely electrified. While they sat and talked, Paul had pulled out a sketchbook and a packet of watercolor pencils. He said he wanted to get down the lines. She watched him, his pale hand moving quickly across the page, her hands, tanned from the Pacific sun, folded in her lap.

The bridge would change those places, Eenie knew, but didn't say. Probably, like everything else in the world, for the worse. The villagers displaced, their huts flattened, their

sacred objects carted off. It wouldn't be his fault, she knew, though she also knew he felt it was. When they were younger, he'd been heroic. Those men with their rifles. Paul between the guns and her, her in front of Alphonse.

Paul was saying something, his picture fuzzing in and out. Maybe it was the virtual snarl of that virus, the one they said was rogue AI, or maybe just the mango bar's shitty connection.

It was amazing, what Paul had turned into, some sort of biological-slash-civil engineer. One of a new breed. As a teenager Paul had checked out, for the most part, only really interested in that private zoo outside of Tell City. She'd asked him before why he hadn't gone into zoology or vet science. He'd grinned and said it wasn't hands-on enough. Now he was some sort of bridge gardener, and she was the one out of touch, old-fashioned even, a futzy astronomer, ivory tower and all. No one cared about the stars anymore, not with all the shit happening down here in the mud.

They'd both been blown across the surface of the planet, she and Paul, along with everyone Eenie had ever known. Most of them, her Olympic team, people from Tell City or Hawesville, schoolmates, colleagues, even, just gone. No contact at all. The greenhouse simmered, and blew, and raged. You either got out in front of it or you baked. You roasted. You drowned.

Eenie was hearing Paul's choppy voice over her link but not listening, thinking about the past, when a man darkened the hazy sunlight streaming in through the bar's open door. Everyone in there turned to look.

He was big. All fat. When he breathed in, wheezing, he blotted out all the light streaming through the doorway from the narrow track outside the bar. All of it. But he wasn't just big. He was filthy, his hair hanging down, uncombed, glistening from oil or sweat or humidity. His T-

shirt soaked, unwashed, streaked with the stains of the lowlands – red clay, bright green moss, black pumice. His pants, khakis once, were singed, campfire, maybe, or lava, for all Eenie knew. Shredded all the way up to his knees.

Weirdly, he looked familiar. Eenie had met him before, but she couldn't place him at first.

Right. The kick-off ceremony last October, at the beginning of *Mahakini*, when she and the rest of the astronomers met this year's team from Loa. Stephens, the volcanologist, was there of course, acting cool. She was going to be Pele to Eenie's Poliahu. And this guy, Eenie couldn't remember his name, was going to play Kamapua'a, the pig child, Pele's erstwhile consort. He'd shaken her hand back then, actually giving her a smile, his eyes dark, receded, behind his glasses. Every year the two camps made nice, like this was just a game.

He had changed since then. All of him was fat, his eyes buried behind loaves of cheek fat, his spectacles long gone. Jungle juice drizzled from him as if he'd walked right out of the bush on the other side of the lane. Maybe he had. He was blinking and wheezing, screwing his eyes to focus in the darkened bar, his breathing audible back where Eenie was, in one of the deep booths towards the back of the mango place.

Paul's image was still in her left eye, Paul's voice in her ear, calm, but the man in the doorway held all of her attention. Those eyes roamed across the little room, ignoring the drunken '*elemakule*. They locked on her.

Chapter 2 - the warthog

Eenie must've gasped, because Paul stopped in midsentence and asked what was wrong, his voice tinny, dissolving into static, then a painful, screeching sound until she reached up behind her left ear and turned the link off.

The big show wasn't for two days. He shouldn't be here. Eenie was incognito, wasn't supposed to be seen, wasn't supposed to be seeing him or anyone from Loa.

But there he was. She was sure it was him, even though he barely resembled the calm, put-together fellow she'd met months ago. But he did look like Kamapua'a, the way she'd heard the story, that ugly, ugly man in the myths Ka'mi had told her. He was some sort of demigod not too distant from the lineage of kings, not quite good enough to be a consort to a goddess and he knew it. He had raged across Hawaii for want of love, his injured pride fueling him, making him madder and uglier, until one day he turned into a warthog. The last two years, the Kamapua'a stand-in wore a costume, a fake pig's head and red robes with a boar bristle cape. This guy didn't need any costume. He'd given himself over to the anger. He was making that transformation for real. She didn't remember the man's name, but standing before her, now, at the edge of the booth, moving quicker than she'd imagined he could, was a being more warthog than man. Kamapua'a.

"You cheat," the human warthog said to Eenie. He had waddled his dirty T-shirted belly over to Eenie's booth and stood there, staring at her, before speaking. His arrival, his attention had been alarming enough. But now he was talking to her.

This was way out of bounds. The waitress gasped out loud. Her father called out her name like a slap on the thickly urethaned bar, and the girl scurried to safety behind it.

The old Hawaiians stared at the warthog's back, mouths open, until their treading-water brains pulled their eyes back down to their mostly finished coconut drinks.

"Uh, what?" Eenie said, more surprised than alarmed. She looked up at the warthog, her mouth open, her eyebrows down. The warthog, breathing heavy, shoulders and tummy moving like boulders, did not hurry to answer. Eenie couldn't tell if he heard her, so said "Sorry?"

"You," the warthog said, the word coming with his breathing, "a cheater, Poliahu." Eenie felt that hard consonant, that P, as dank warmth on the end of her nose, felt her own nostrils flare reflexively until she could smell the air that had just been inside the warthog, swampy, like coconut milk fermented in the shell, the shell burst by the gasses, like a leftover pina colada from when this place had been a tourist trap, back when there had been tourists.

Eenie's academic instincts took over. "No, I... You're mistaken. The race was fair. Is fair. There are rules. The Cultural Reaffirmation monitors the whole thing. Everybody watches."

"You. Magic 'em." The man, two meters at least, taller than he had been, leaned into the table at the far end of Eenie's booth. She was way back, the deep end, her usual place, slid into without thinking. With nowhere to go she pressed herself into the back of the bench, trying to gain as much distance between herself and the warthog as possible.

"You. Magic 'em. You. Pay dem off," he said, thrusting his pelvis against the table nudging it towards Eenie. She was pinned now, gasping, her hands slipping on the thick lacquered tabletop, postcards and photos and tourist maps glazed underneath, insects in amber, artifacts now. She gripped and pushed back as hard as she could, able to draw in another breath.

"No. It's not possible. Every second of the race is televised. Everyone watches. How could I cheat?"

The warthog grunted, possibly a laugh. “You deir whore, Poliahu. They love you. They make you win. But not this year, cheat. Magician. You magic all gone. This year, Pele wins. Her magic stronger than yours. Lava magic. Pele! Pele! Pele!”

With each intonement, the warthog’s belly pushed the table hard into Eenie’s abdomen. She looked around the bar, all the old men with red showing now, red shirts, bandanas, strips of cloth tied around their arms. Lavaheads. They were all chanting along with the warthog, all except the half-Kepani waitress, who was behind the bar and staring. Eenie couldn’t raise her hands from the table edge, couldn’t call out, but the girl’s father did from the shadow of the room behind the bar. The waitress jumped and scurried, disappearing behind the tinkling curtain of shells and sea glass.

Now Eenie was alone with the warthog and the reds. And her link. She lifted her left hand from her end of the table, the edge biting more into her middle, to her left ear. She searched for the on switch.

“Your day is over, Poliahu.” The man leaned over the table, his face closing the gap, droplets of sweat pattering from his wet, greasy curls onto the table top. “Your magic gone. Lava magic now. Now and forever.”

The link behind her ear powered on. The warthog’s eye flicked to the link’s LED, as it widened and searched. The man moved fast, whipping his head to the right, clapping his left hand over his profile. His right hand slapped wetly on the table. He pushed off, his weight pinching into Eenie one last time, and sprinted for the open doorway, moving much faster than Eenie would have guessed possible. He eclipsed the haze-softened daylight streaming in for a second and was gone.

Eenie sat and sucked in air, unable to speak, the mango she'd been drinking tipped over, its viscous juice spreading over the table, dripping down her thighs. The link sensed her distress. Eight seconds later the security platform that had been circling over the Poi Poi's roof had dropped out of the sky and hovered just outside the doorway. Rogers' voice blared from the platform, ordering everyone to stand back, even though no one was there. Eenie needed air; she couldn't get enough into her lungs in the closeness of the barroom. She slid around the side of the booth and walked unsteadily to the door, her arms crossed over her abdomen as if she'd had stitches from running. Rogers talked to her over her link, concerned.

“You okay, Eenie? Are you hurt? What happened?”

Eenie didn't know if she could speak, but she sucked in a shaky breath and gave it a try.

“Yes, I'm all right. I think. It was a... man. He talked to me.” she said.

“Pulse rate high, a... what did you say? Somebody talked to you? Who?”

“I...” Eenie looked around. Nobody up the track towards home, towards Maunakea. Nobody down, towards town. The platform tracked the movement of her eyes, its cameras looking in the same direction she was. Her head swiveled back to center, to the tropical rainforest that started just across the road, a scant five meters away. No sign that the warthog had just crashed through there, but there was nowhere else he could have gone. The land was level for maybe another meter, and then it shot down into mile after mile of ravine, then down to the sea cliffs, a narrow beach, and the rising Pacific. He came from the jungle, the warthog, and then he went back. Eenie shivered. He could have been standing right there, an arm's reach from me, when I went in. Probably was.

Rogers must have registered her stare at the green. “Security measures,” he intoned, and the platform responded, moving itself between Eenie and the jungle. She could smell the ozone

from the crackling electricity on its outward tasered edge. A second platform angled down from the sky. It dipped to a position below Eenie's waist. Normally she would have protested, preferring to hike back up to the observatory, but she had had enough. She sank down onto the platform without protest. Two seconds later she was thirty meters up, high above the Poi Poi. The bar was soon engulfed by the foliage that surrounded it. The platform slid through the sky, moving up the slope of Maunakea, towards home. The ascent was soundless and smooth, like in her dreams. It would take the platform minutes to get to the observatory compound, as it roughly matched her route down to the town. It had taken Eenie most of the day to pick her way downslope. Far too long.

The warthog was right, Eenie knew. There was no way she would win the race this year. All she had to do was to look up the barren slope in front of her to know. The snow was gone. Five hundred and fifty three days since snow last fell on Kea. Last year's snowpack, left over from the year before, had been burned away by the summer sun. The greenhouse had finally caught up with them.

Eenie turned her eyes back down anyway, scanning the terrain underneath her. At 3,000 meters the trees shriveled like those hateful, snarled old men from the bar and died away, baring the brown earth. No snow anywhere, no matter how high they climbed, not as the air cooled and Eenie began to shiver, not all the way to the observatory complex. No chance of snow, either, not even with the tropical storm, Saachi, hovering over the horizon.

The lowlands of the Big Island telescoped away. The air was dramatically cooler at this altitude, maybe only 2 or 3 degrees C, but Eenie felt warmth on the left side of her face. She didn't want to, but turned that direction, towards the heat, towards Maunaloa. Its lava flows ruddy, perceptibly radiating heat even at this distance. The volcanologists' compound was

hidden by a mix of steam and volcanic gasses, but she knew she was not invisible to them as she glided past. They were surely clocking her platform, just as the astronomers, from their higher vantage point at the top of Maunakea, kept tabs on them. At night, especially when the moon was new, whichever of Loa's magma fields was active shone a sullen glow on the stainless steel telescope housings up on Kea's chilly summit.

Though Eenie had never been religious, there was something about Hawaiian mythology she found appealing. The stories her grandfather had told when Eenie had been little were all about balance. Nobody, not even the gods, was all powerful. Each force was counteracted by another. Maunakea and Maunaloa were poles; fire and snow. Their patron deities, Pele, goddess of fire and ravaging lava, and Poliahu, goddess of tempering coolness, of icy, artful quickness, the only one to ever best Pele's rage. But now, finally, after millennia, the snow had evaporated. Kea's flank was bare, bone dry. The balance was gone.

Chapter 3 - fine, white *kapa*

Eenie's platform sailed through the dry, cold air, over the fence that surrounded the observatory compound. A group of white-clad figures crowded around the main gate at the end of the road. Polis, Eenie thought, come to see the beginning of the race. Though outwardly the Hawaiians seemed to be clad in traditional thin fabric, Eenie knew their *mu'umu'us*, sarongs, and aloha shirts were laced with heat threading. The Reaffirmation hadn't outlawed technology, as long as the forms and traditions of the old Hawaiian Kingdom were observed. The only pre-Contact garb she could see were *kihei*, elaborately patterned ponchos made out of *kapa*, fabric made of bark beaten soft and fine. The *kapa* was interwoven with a radiant infrared barrier. Time, like lava, only flows one way – a popular Reaffirmation slogan.

One man saw her moving overhead and turned his back, spreading his arms. On it, Eenie could see a rough, hand sewn approximation of her face in the Poliahu headdress in beads and shells. She winced at the garish emblem.

The platform settled down in the clearing between the control center, the fence, and the military bunkhouse that had been choppered in just before the US pulled out. Three Marines clad in black rushed out of the barracks, getting to the platform before Eenie could slide off. Kal was at the front of the bunch, her compact form streaking across the dust, her dark eyes on Eenie in concern. She handed her rifle back to the next guard without looking and grabbed Eenie with gloved hands.

"You okay?" Kal said. "You hurt?" Kal brought her hands up to Eenie's neck, her thumbs testing her cheeks. Her gloves were rough at first, then turned supple against Eenie's skin. Kal twisted Eenie's head, scrutinizing her for bruises or cuts.

Eenie brushed Kal's hands down, away from her face.

“I’m fine, Kal,” she said. Kal squeezed her way down Eenie’s arms, probing, then brushed against Eenie’s side. She hissed in pain. That’s where the table had pinned her.

“You’re not fine, Eenie,” Kal said, her voice clipped. It was too dark to see, but Eenie knew the bridge of her nose had screwed up into that furrow in her dark skin, the same as when they were kids. Kal glanced back over her shoulder, nodding towards Bertrand, the platoon’s medic. He grabbed the loops of a red duffel and started jogging over.

“I told you to not go out unsupervised. Not to go into town. I shared our intel with you. You’re supposed to be a god. Damned. Scientist.”

“Get off my case, Kal. I was training. It was on the schedule. You’re not my fucking mother.” Kal had turned back to look up at Eenie. Eenie felt Kal’s body stiffen.

Shit, she thought, we’re already back to being children. “Look, Kal, I…”

“Eenie. You are absolutely the bravest person I’ve ever known. I love you so god damned much I would do anything. Anything for you.” Kal had brought her hands back up to Eenie’s face. Kal’s face was tilted up, her eyes, wide, the whites gleaming with light captured from the LED spots.

“Eenie. You remember where that came from, right?” Kal said.

“I remember, but not who said it first.” Eenie brought her hands up to brush Kal’s gloves off her face. Kal let go before Eenie made contact. Eenie flushed, feeling stupid. “You?”

Kal bit her lower lip, her eyes dancing. “Oh, yes. Paul called you the kudzu queen, up in them vines. Then Luke started in with Queenie. Teasing. You didn’t like that.” Kal looked down, then back up.

“You looked out for me. Wouldn’t let those rednecks tease the black girl. I called you Eenie first. You liked it.”

That sounded right. She and Kal had been close as kids. Particularly so after Eenie's mom left Kal's biological father, Kaolo, a merchant marine from Cameroon.

"But you're not just my big sis anymore, Eenie. You're an asset. Got that?"

"Yes, Kal."

"I'm in it as long as you are," Kal said. "Unless you're tapping out. Are you tapping out?" Eenie got what she was saying. Years ago, the new US ambassador to Hawaii had made a standing offer to evac Eenie and the rest of the staff if relations with the kanaka turned ugly. They had four years ago, when the Hawaiians had stomped up the mountain. They'd been ready to push down the fences then, rip the whole observatory off Kea. Kal had asked her then if she wanted to bail, and it had been dicey. Somehow, Ka'mi convinced the mob to back off. Eenie hadn't heard from the embassy in a long time, though maybe Kal, still technically employed by the US military, had stayed in touch.

"No. I mean, who knows." A weak smile came over Eenie's face. "Ask me again in three days."

Kal pointed with her chin towards the telescope array behind Eenie. She stepped back and spread her arms wide, pointing with one hand to the crowd of astronomers and technicians that had come out of Control.

"You're the most important asset we got up here, Snow Queen," Kal raised her voice as she backed away. She looked behind Eenie, pursing her lips as she pointed with her left hand.

Eenie turned. A small brood of kahuna approached from the *luakini*, the tiny temple on the far side of the road, built from straw on a plinth of hand-carved pumice flagstones. Ka'mi was, of course, in the lead. Eenie waited for him, her irritation growing. First Kal's theatrics. Now this. Eenie was just about done for the day.

“Poliahu,” the old man said as he approached and bowed, his arms out, his *kihei* on full display. Its white on white decoration was at once ornate and somehow unassuming, a world away from the elaborate, vibrant dress of most islanders. Eenie knew firsthand how incredibly soft and comfortable the robe was, like a baby’s blanket. It was amazing, considering it was made out of tree bark.

“I am so relieved to see you safely back.” Just then Bertrand prodded her side, causing Eenie to wince again. He reached into his bag for some remedy.

Ka’mi’s wrinkled face wrinkled more with concern as his head turned to watch the medic work. The old man spoke volumes just by inclining his head.

“Thanks, Ka’mi, but I’ve told you over and over that when I’m not in the costume, I’m not Poliahu. Janice. Janice is fine.”

Ka’mi turned back to face her, his eyes widening, then he looked back at the other two white robes. Eenie’s attendants. Just seeing them made Eenie’s stomach twist.

It was too soon. They would get their hands on her soon enough, when she had to put on the ceremonial garb just prior to the race. They would try to dress her until she literally pushed them away, and not leave until she was adorned and festooned to their satisfaction. They were Eenie’s age – old enough to know English, though they never spoke it. Probably just pretending. Eenie took great satisfaction in pretending not to know their names in defiance.

She wore the costume, she thought as Bertrand strapped gauze around her midsection. The costume meant she could keep gleaning wisdom from the disinterested cosmos. Didn’t mean she liked the damned thing.

Chapter 4 - messengers (*na 'oumuamua*)

Long before morning, Eenie climbed up the stairs to Gemini. A pod of extrasolars was due through, transiting Jupiter, and she wanted to get some observation time in. Gemini wasn't fast enough to track them, but she could probably get some still images from the big lens.

She had a little time before she needed to zero in on her target. She climbed up to the observing floor, the amber light just enough to see the stair treads. The instrument floor was empty. The enclosure was wide open, the vents and the telescope shutter doors both. It was cold, as always, to keep the instruments at ambient temperature. The control room was dark, except for a green glow in one corner of the window. Kathleen, probably, uplinking the data from her transit.

She walked over to the open doors, trying to shake the race from her head. Gemini's big eye pointed up at a steep angle, staring. Eenie matched its prospect, gazing out at the night sky of the North Pacific. The sky was crisp, sharp, far above the boundary layer of heat and humidity that made everything down-mountain waver out of focus. There was Ursa Major, crystal clear, easy to pick out in the deep, darkening violet. The moon was already setting off to the west. Jupiter was almost at its zenith.

She didn't like playing Poliahu, but she wondered if that mythical goddess had been modeled on someone like her. Someone curious. Wondering what was out there, if the big mountain in the middle of the ocean was, you know, it. As big as anything ever got.

From what Eenie knew, the Hawaiian pantheon wasn't exactly omniscient. So maybe Poliahu didn't know the secrets of the universe. But the goddess had liked her solitude, her vantage point the highest for thousands of kilometers. And at night, in the old days, forget it. The sky was the story.

That's what Eenie wanted. One more night with her eyes on the heavens. Forget about all the terrestrial bullshit, for now at least. In the control chair, all she had to think about was coordinates, tracks, magnitudes, angles. She'd fire up the guide laser, free the base of the telescope, and feel it thrum as it moved into position, to zero in on Jupiter's face. Hopefully she'd remember why she agreed to do this ridiculous event in the first place.

She was tired. Each year the race took more out of her. Sixty some-odd kilometers, with a five thousand meter drop in elevation. This year, there seemed to be no conceivable way she could win. The telescopes would be shut down. There weren't too many eyes on the sky anymore. Gemini South was gone. Dozens of other observatories dark now, whether by politics, economics, or blinded by the miasma of a changing climate. That's what killed her house – her stepfather's house – back in Hawesville, too. Rising temperatures had turned the Midwest hot and humid as the old Deep South. The kudzu had run riot.

Paul's house – his uncle's actually – was on the other side of the Ohio River, the Indiana side. It was still there. Did it help him to know it still stood? It probably did, Eenie thought. She was the one adrift. No home, not anymore. Not here, not if the Hawaiians tore this place down. Everything else gone, too, anything important. Well, not everything important. Her brother, Lucien was doing fine. Great, actually. A strategist, Luke had emigrated with his family to Canada years before the States had split like river ice in springtime. Kaolo's house was close enough to the river that Eenie could hear the ice as it squeaked and wheezed, contracted, then finally floated away, like America had from Hawaii and most of its other outward possessions.

Kal, like Luke, had weathered the strange times well, too. She'd joined the military, and used to vanish for months without a signal, then reappear as if she'd just been down at the

Walmart. The greenhouse, the instability - it fed her, somehow. No matter how this world crazed, no matter which way the fault lines ran, Kal was right there, racing alongside.

She didn't know how they did it. When something bad happened, a part of Eenie was ripped right out of her body.

Like Paul. He was there. But, you know, there. In China. Not here.

Eenie walked across the catwalk to the stairs, then down to the control room. She slipped in through the light lock into warmth. She peeled off her mittens and her parka, flexing her stiff fingers.

Kathleen was hunched over the vid screen, her face flashing blue green. Her eyes flicked up to Eenie, then back down. Her fingers danced over the screen.

"Almost done," Kathleen said.

"No rush," Eenie said. "Clarity good?"

"A little thermal variance. Just a smidge of distortion. Well within tolerance."

"Space weather?"

"Clear, in my quadrant. Not sure about yours," Kathleen glanced up.

"The lens is, of course, a different story."

The lensing surface, stainless steel, hadn't been replaced since Gemini was installed almost thirty years prior. It was way out of date. The techs, all Hawaiians now, polished it as best they could, happy to be involved in something outside the prescribed Reaffirmation career path. Kathleen was good-hearted. She wasn't blaming Eenie for the deferred maintenance, but Eenie couldn't help but feel stung.

"Yeah, you know, Kathleen, I'll see what I can do."

"Not what I meant, Janice," Kathleen said, coolly.

Eenie had a hard time reading Kathleen. She was the only astronomer up on Kea that was local. She was full kanaka, from Kauai, both parents Hawaiian. She'd interned at the Keck telescope, over on another of Kea's shoulders, in undergrad, completed her dissertation at UH-Manoa, long before the Reaffirmation.

Kathleen was like two people, to Eenie – most of the time a scientist, a colleague, but also spiritual, connected to Kea in a way Eenie didn't understand. Kathleen spent time in the *heiau*, the little temple of volcanic rock on the path to Lake Waiau. Every once in a while, at the end of a long shift in the observer's chair, Eenie would catch sight of Kathleen's silhouette in the sunrise, her form in the long, slow movements of hula.

To Eenie, the costume felt like play-acting. She was not at all religious, and playing a mythical anthropogenic weather pattern felt like schizophrenia. It was false, embarrassing. Most of the scientists on Kea simply ignored the race and its ceremonies. Politely, cleanly, completely. That reaction Eenie understood.

So every interaction with Kathleen was layered, this one included.

"Look, Kath, I just want to punch in my track plan and get to work," Eenie said. "I'm not trying to start something here."

Kathleen typed in a final command and looked up at Eenie. Her face softened, her brows unknitting, the right corner of her mouth dropping as her lips pursed.

"I never told you this, Janice," Kathleen said, then went quiet. Eenie sucked in a breath and waited.

"I...Before you..." Kathleen sighed, shook her head. "I used to play Poliahu."

"What?" Eenie said.

“This was before. Before the Reaffirmation took hold. Each year there would be a procession to Lake Waiau. I wore...” Kathleen waved her hands at Eenie up and down. “Your robes.

“The nation – that’s what we called ourselves back then – would walk up to Waiau, some of us dressed as various deities. The four snow goddesses, of course.” Kathleen shrugged.

“I was Poliahu. I was working over on the Keck telescope at the time. It was a short walk for me.” She laughed. “We would walk up the trail to Waiau, and there I would dance the hula of the clouds, for Kane, my – I mean Poliahu’s – father.”

Eenie was transfixed. She had walked over to the lake once. It was very small, essentially rain that seeped down through the volcanic soil, leaching minerals until it was a bright green color. She had been unimpressed with the pool, more so with the view of the telescopes, a couple hundred meters higher, across the water.

“Each year the crowds grew, until the fences went up around the telescopes. That made it harder, somehow. Outside I was with the people. But after the ceremony, I had to come back in, take off the ceremonial dress. It felt like I was taking off part of who I was.”

“Kath, that’s, that’s terrible.”

“Let me finish,” Kathleen said. Eenie closed her mouth. This was more conversation than Eenie’d had with Kathleen in years. It was probable that they’d never talked so deeply before.

“But then the Reaffirmation came. And they came up to the observatory, in their robes, scowling. We all knew what they wanted to do. They wanted to get rid of this place. Cleanse Kea.” Kathleen shook her head again. “To them, the choice was simple.

“I was on our side of the fence. This side,” she tapped her fingers on the console. “Here, I feel as you do. We must keep looking. When I saw the faces of *na kahuna, na alaka’i*, all of the faces of the Reaffirmation against us, I felt, again, like I was being torn in two.

“So I went to my quarters, thinking they would soon escort us all off the mountain. I sat on my bunk. Without thinking I went to my closet and pulled out the robes.” Kathleen pointed at Eenie, waving her hand up and down. “Walking out into *ka lehulehu*, all those eyes on me,” Kathleen trailed off. “The hardest thing I’d ever do.”

She looked up at Eenie. “This was just before you came here. A few of the leaders, the priests, stayed behind when the others left and they talked. Ka’mi spoke of the nature of Poliahu, of her alone on the summit, with her sisters. Of her connection to the heavens. I think I held them off. Helped, anyway. Made them think. But that was all I could do.”

“I couldn’t stand between this place and the people of Hawaii. My people. Not like you do. You are... so much like her.”

“Like – Poliahu?” Eenie laughed.

“You are of us but not of us. Isn’t that so?”

“Well, yes. I guess. My grandfather, my mother’s father was Hawaiian. At least part.”

Kathleen nodded once, then proceeded.

“The *kanaka* – particularly those of royal lineage – are close to the gods. And Poliahu was aloof. And pale. And an athlete without rival. All this is you, yes?”

“Well, I don’t know...”

“Janice. I am a scientist. I observe. Are my observations correct?”

“Yes. I...yes,” Eenie said.

“Fundamentally, Poliahu is. She doesn’t think about the weight of her being in the world. She doesn’t care about pleadings or adoration. She just is. She does what she needs to, what she wants. She fights for her land, her place. Otherwise she’s happy to set her position aside.

“That is you, Eenie.”

Heat rose up Eenie’s throat, her jaw, her ears. Her head shook slightly, side to side. She couldn’t look at Kathleen.

“You have kept this place running for three years now, three years more than anyone ever thought. No matter what happens,” Kathleen’s voice caught. Eenie looked up to her eyes, shining.

“Thank you. For letting me be in two different places at the same time.”

Kathleen pulled Eenie into a tight hug. She could feel Kathleen’s arms thrumming with tension. Then she let go, sliding past Eenie in the instrument-clogged aisle, to the coat rack. Eenie couldn’t make herself turn around and look, but she heard the slip of the parka’s rayon against her clothes, the cut of her zipper.

“For what it’s worth, whatever happens,” Kathleen said. Eenie did turn at that, and looked straight at Kathleen’s face, clear and sincere. “I hope you stay.”

Some time after Kathleen left, Jupiter filled the monitor of the control screen. Eenie focused in, wanting a closer look of the planet before backing out to the band of space where the extrasolars were supposed to arc through. The planet looked quiet, calmly patterned, but Eenie knew the silence hid the terrible turbulence that roiled from its outer surface down to the frigid rocky core. Jupiter would tear this earth apart in an instant, and everything from her world would be gone. Her dead father’s dead house, the lavaheads, the lunatic proctors of the Reaffirmation, everything that was already tearing the world apart. No more race. No more worrying about what

would happen if she lost. She'd done her part to keep the array operational, even as the kanaka hounded and howled. Run the race, get to stay. Turn it down, it all comes down.

There was nowhere else to go. She'd watched, they'd all watched in horror as Gemini South went down. The mob had marched right up Cerro Pachon. The military cordon melted away as they came up the pass, letting the mob push the fence down and move in. They'd gone for the telescope first. The satellite feed picked up the winking lights of arc cutters all night long. The next morning Gemini's tube was on the schist below the observatory. They just picked it up, ants carrying a grub, slid it over the cliff, and down it tumbled. Then they came back and pulled everything else apart. They burned what they couldn't move.

Another window to the universe gone, another victim of the greenhouse. The heat was driving the whole world mad. Nobody cared anymore, not really, about anything outside the super-insulated atmosphere. Hunger, death, disease, flood, drought had regressed humanity back to geocentric.

They had to keep looking out. Eenie knew this. They couldn't fall back into ignorance and superstition. Eenie's bargain with the Cultural Reaffirmation kept this lens – the five of them left up on Kea – open, peering, searching.

Eenie's link chimed. It was time to focus on the extrasolars, the messengers from somewhere else, and let Jupiter be no more than a bright fuzzy background. Blurred shadows were already occluding the reflected sunlight. She brought the pod up, the focus as tight as she could get. The rocks were oddly shaped, reddened by eons of radiation bursts. They didn't have an atmosphere's protection, while the world smothered under a too-hot blanket.

Enough of that. She let everything go and looked and documented and saw.

Chapter 5 - power trip

Someone was nudging her. Eenie opened her eyes. She knew she hadn't slept long. Kal's face loomed over her, almost as dark as the room, a thin line of her face illuminated by a beam of light stealing in around the blackout shade of the window above Eenie's bed. Kal was saying something, but Eenie's brain wasn't awake enough to process the sound. She groaned, and Kal stood up.

Kal spoke again, and this time Eenie could hear her.

"Let's go, snow queen," Kal said.

"What is it?"

"Outside. You're needed." Kal was in uniform. She picked up the rifle she had leaned up against the door frame. "We've got a situation." When she saw Eenie wasn't getting up she stepped back over and pulled her into a sitting position.

Eenie waved her off. She reached up to the window and pried open the blackout shade. Daylight streamed in; at this altitude it was harsh and true. Eenie's eyes teared at the sudden brightness. Noon. Way too early.

Kal crossed the room and went through the door, leaving it open a crack. Eenie sighed. She was supposed to follow, though she wanted nothing more than to go back to sleep. She scooted to the edge of the bunk and started pulling on outerwear.

A minute later she shoved on her boots and went to the door of her room. At the end of the hallway outside, Kal was standing in the door, her rifle in hand. When she saw Eenie moving towards her, she muttered into her lapel.

"Snow queen moving. She's coming out. Eyes on."

Eenie made it to the door. The air was frigid, maybe a degree or two above zero, though the high sun pierced the thin atmosphere, warming Eenie where she stood. She looked instinctively towards the gate at the end of the access road. It was guarded, with the crowd of Polis still outside, fans or adherents or disciples or something, Eenie never could precisely place the motivation behind their fervency. The crowd had increased since yesterday, and more would continue to arrive until the race began. Some of the Polis looked up at the sound as the door slammed behind Eenie. One or two of them, obvious excitement on their faces, started to wave and exclaim, but others, seeing Eenie in her parka, trousers, and boots, quickly shushed them.

On the inside of the fence, another group of people was gathered on the small, relatively flat plaza between the scientists' living quarters, the administration building, and the gate to the complex. Two groups, actually, Eenie could see as she moved to the guardrail at the edge of the landing, standing rigid, a no man's land between them. The closer group was her people, astronomers, a few technicians. Dave Rogers was at the center of the group, along with Ka'mi. Kal was walking over to join them. Eenie was, assumedly, supposed to follow.

The red blazers of the other people gave them away. Geoscientists. What were the lavaheads doing here the day before the race?

One of the visitors was talking with Rogers, his palms open, outstretched. Rogers' shoulders were stiff, his hands folded behind his back, displeased at whatever they were talking about. The rest of the geoscientists were looking around, though the presence of the Marines dissuaded them from wandering. One pointed towards a building. Her gesture caused one of their drones to separate itself from the constellation orbiting the geoscientists and move towards the building, the observatory's power store. The other Marine gawked at it until Kal, who'd walked

up behind him, shoved his left shoulder, causing him to stumble forward and look back at her. She jerked her head in the drone's direction. The Marine trotted after it, his gun trained.

They're tallying our resources, Eenie realized. They're ready to carve us up. Bastards.

"They must be pretty sure they're going to win," someone said, the voice coming from behind Eenie. She turned. It was Haru, the observatory's chief proponent in the *heiau*, the seat of government on Oahu. He was leaning up against the wall of the dormitory, watching the strained negotiation. Eenie was surprised to see him. Things must not be going well.

"Are they?" he said. Haru turned his head towards her, tilting it in a question, infuriatingly slight.

Eenie didn't answer him, her stomach rolling with rage and something else - anxiety, maybe, or sheer desperation.

"Probably," she said. "You know the situation, right? No snow. I can't fucking sled without snow."

"Hmm," Haru said. "Well, I guess that's it."

"What do you mean?"

"You said it. We're done. You might as well pack it in."

"Save it, Harry. We are in deep trouble here."

"Yeah, Eenie. We are. We," Haru said. "This isn't just about you, or just about the observatory. My reputation – our reputation – is at stake here. The lavaheads have plenty of pull at the temple. If we don't..."

"If *I* don't, Haru," Eenie said. Haru pursed his lips. Eenie noticed he hadn't shaved, which was in contrast with his impeccable robe of office.

“If *you* don’t beat the geoscientists, then the Reds win. Simple as that. They’ll start by expunging your crew, but it won’t end there. There’s a faction at the temple – a strong one – that wants to expel everyone not kanaka. Everyone not Hawaiian. Do you get that?”

Yes, Eenie got it. But it was too much. The telescopes – that was one thing. But now Haru was laying mass exile on her shoulders?

“This is your game, Haru. Your rules. What am I supposed to do?”

Haru said nothing. He came and stood next to her at the railing.

“In the legend, Poliahu wins.”

All Eenie knew about the myths of Hawaii were the stories her grandfather told her when she was a child. She certainly knew the story of the race between Poliahu – the goddess she represented – and Pele. Pele had challenged Poliahu to a *holua* race not once, but three times, and Poliahu won them all. Pele, the embodiment of the scathing fury of lava, did not take defeat well. She attacked Maunakea, Poliahu’s home, with lava from deep underground. Poliahu and her sister snow goddesses cooled the lava with ice and freezing mist, thwarting the attack.

Haru was right. Eenie was supposed to win. If she didn’t, the old story would be unfulfilled, and the Reaffirmation would not be happy.

One of the geoscientists walked away from the crowd. Stephens. She went over to the fence, then walked along it, periodically stopping to peer over the steep edge, down Kea’s flank. Eenie tightened her grip on the handrail as Stephens peered over, seeing what Eenie already knew. She made her way to the ceremonial platform where Eenie would start her run less than eighteen hours from now. Eenie let go of the railing and pounded down the steel grate treads.

“Eenie...” Haru said to her back. Ten quick strides later and she was at the platform.

“Dr. Kiernan,” Stephens said as Eenie approached.

“Dr. Stephens,” Eenie said, “please step away from the equipment. I would hate to see you accused of tampering with the race.”

Stephens backed away, her hands up. “I didn’t touch anything.” She smiled. “Not that I need to.”

“Oh, really? Why is that?”

Stephens simply looked at Eenie. She didn’t look down, didn’t have to say anything. They both knew Eenie’s advantage was gone.

“Because you already sicced your pet asshole on me?”

Stephens’ face darkened. She visibly struggled for composure. “Look, Janice, we had nothing to do with what happened yesterday. We got rid of that guy months ago. He gave everyone the creeps. We didn’t even know he was still on the island.”

Eenie searched Stephens’ face. She seemed sincere.

“I don’t know what to tell you. What do you want me to do? Forfeit? It wasn’t us, Janice.” Stephens threw her hands up and walked off, glaring at Haru, on his way down to the edge.

Unsatisfied, Eenie turned her frustration on him. “What about the Reaffirmation? What do they plan to do about yesterday?”

“The altercation is over, as far as the race officials are concerned. There was talk of increasing security. I mean, from me at least. I demanded it. But most of the *moku* leaders see it as an isolated incident.”

“I wasn’t in the damned robes, Haru. I was incognito. I’m supposed to be fucking invisible.”

“I remember a time when being incognito troubled you.”

“Don’t twist this around. I was attacked,” Eenie said.

Eenie climbed up to the platform and walked over to the edge that looked out over her run. Way down the slope, near Kea’s foot, was the town of Volcano. The warthog had gotten away into the vertical, almost impenetrable jungle that surrounded the town. She would pass through there again in a few days, she thought, and shivered. But she was more concerned with the beginning of the journey, and so she looked down the slope just below her feet.

A vertical slide of brown dirt, carved years ago into the mountainside, dry as a dust bowl. No white. No snow. Without snow, there was no way she could gain time on Stephens. Loa was not as tall as Kea, and it was also a little closer to the finish line. A straighter run. Stephens’d beat her by hours.

Haru stepped up next to her, following her gaze down to the dry earth. “Okay, it happened. But you’re all right, aren’t you? Maybe we can make this work for us.”

Raised voices from behind them caused Haru to turn. Eenie followed his gaze towards the clump of people over by the gate. Rogers had apparently had enough. He was sweeping his hands, herding the geoscientists towards the gate. Kal and the other marine were dragging something enmeshed in webbing – the drone they’d sent to monitor, shot down. Kal would have some kind of excuse. The lavaheads did not look happy. Good, Eenie thought.

The white-clad Polis started jeering as the geoscientists were pushed outside the gate. They got in their vehicle, a slick truck with a heat-shielded undercarriage and solid tires. Stephens stepped on the running board of the truck and hesitated. She shielded her eyes and looked over at Eenie and Haru. Ka’mi, Rogers, and Kal were walking over to join them. Stephens frowned, then raised her hand from her brow in salute. Eenie nodded her head in

response. Stephens slid down into the truck and it drove off, trailing a cloud of drones, as the Polis chanted in derision.

“Maybe yesterday’s situation will afford us some latitude,” Haru said, watching the volcanologists retreat.

Eenie turned to look at him. Finally, she thought. “What are you thinking?”

“This race is based on myth,” Haru said. “You’re supposed to be a goddess.”

“Goddesses come from Kentucky, then?” Eenie wasn’t tracking. The old myths were just that. Myths. Fairy tales. Haru watched her as she processed.

“It can’t be anything blatant,” Haru said, looking down at the chute. “Something that can be chalked up to your, you know, powers.”

“I don’t have any powers,” Eenie insisted.

“Poliahu does,” a voice said from behind them. They both turned. Ka’mi.

“Poliahu has magic,” Ka’mi said. “Snow magic.” Eenie turned, thinking he was joking. His face said otherwise. Rogers was right behind him, his brows raised, his eyes wide. She could see right through them to the gears working in his head.

That evening, the priestess of Poliahu welcomed her supporters inside the compound, and they feasted. The white-clad Polis had brought up a huge spread. Fish, from the ancient fishponds, restored after hundreds of years of neglect. Kalo, from *lo’i*, artificial wetland ponds dug out by Hawaiians a thousand years before they were razed for pineapple plantations and golf courses. The Reaffirmation geographers and agronomists had recently mapped the traces of historic wetlands all over the island, finding them in almost every valley. Breadfruit, chestnut, mango. Once, every valley on the Big Island was an engineered agricultural factory, fed by rain-

swelled creeks, its soils and bogs nourished by volcanic minerals. Soon Hawaii would be that way again – bountiful, self-sufficient. Better off than much of the outside world.

The man with Eenie’s face on his back offered her a crock of native berries, slow cooked in their own juices. They popped in Eenie’s mouth, tart, reminding her of the river plums from the woods around her stepfather’s land back in Hawesville.

She was sitting at the head of a long, makeshift table out under the stars, her sister gods beside her, her followers around her. Kathleen was in the white gauze of Lilinoe, not quite as bright as Poliahu’s. She winked at Eenie. Jane Tippett, an astrophysicist from Leeds, was Waiau. Her robe was blue, to match the color of Waiau Lake. Jane had been studying cosmic background radiation, peering into the beginning of the universe. Fascinating work. Some Hawaiian girl from Kalaloa was Kahoupokane, a kind of clone of Poliahu from another extinct volcano, not quite as tall as Kea. Kahoupokane’s powers must be weaker than Poliahu’s - it hadn’t snowed on her mountain in more than a decade. The girl either didn’t speak English or simply chose not to speak it. Rogers, his technicians, and much of the rest of the observatory staff were not present, working, presumably, on whatever idea he’d come up with. Snow was how Poliahu beat Pele. Without it, she lost.

The Polis knew that, too. As dinner was cleared away, their leader got up and started to speak. His words soon changed into chanting. Some of the others pulled out instruments – drums made from gourds, hollowed out bamboo sticks, rocks, a few ukuleles. Eenie knew they’d be chanting all night, though she was uncomfortable with the knowledge that while some of those prayers would be to Poliahu the mythical snow goddess, some of them would be for her.

Eenie wondered if Rogers had something that would help. She hoped he did. She watched the hula for a while. Before it got too late, she excused herself and left, meaning to find Rogers.

First, she stopped by her quarters to shed her costume. She had gotten down to her civilian clothes, when there was a knock on the door.

She told whoever it was to come in. The door opened, and Ka'mi's head poked around it.

"How are you feeling?" he asked.

"Tranquil, oddly enough."

"I'm not sure I like that," he said.

"Maybe we've got a shot. Maybe we don't. Losing won't be so bad, will it?"

Ka'mi said nothing. Though he portrayed a steadfast blitheness concerning the operations of the observatory complex, Eenie suspected he was genuinely interested in the telescopes' work. Outwardly, he was a kahuna, a priest concerned with Hawaii, its people, its traditions. The race was a way to bring the old stories back to life, assuredly, but maybe knowing more about the sky would do that too.

The old man turned to leave. Then, he turned back.

"I," he said as he began to lower himself to the ground, "as you know, am honored. Privileged to serve, Poliahu, she who lives with her feet lightly on the earth, and her soul in the stars. The stars that guided our forebears to this land, that govern the beginning and end of our sacred seasons. I am happy that my position, my fate rests with you, fleet, artful, frictionless Poliahu. You will never lose." He was on his knees in front of her. He had never done that before.

"Ka'mi? What are you doing? Please get up. What are you saying?"

"I... I am saying nothing more than what I said before. You are Poliahu. Use your magic. They will expect your magic. Overlook it. Ignore what they do not know."

“You’re thinking about what Dave Rogers is working on. The sublimation, the super cooled...”

Ka’mi raised his hands in front of his face, warding off her words. “Your magic is your own, Poliahu, not for the uninitiated. It must not be comprehended.”

“Huh.” Eenie watched as the old man got up from his knees, a slow process. He moved again to the door. She thought she knew, finally, what he was saying. But she had to push further.

“What is magic, Ka’mi?”

He kept moving. The door handle was in his hand. When he did answer, he did not turn back to face her.

“Mahalo,” he said, and he was gone.

Wonder. Magic was wonder. All the years of peer review, of evaluation and verification, of open access and data sharing, all the modes and perspectives that advanced science over the years, all these controls Eenie had internalized. What Kami proposed was the exact opposite. The move of a priestess, not a scientist.

If it was magic, it wasn’t cheating. It was time to see what Rogers had in store.

Chapter 6 - *holua* time

Morning. Early. Eenie stood at the starting line, at the top of the chute, lined late last night with magical snow that Rogers and his team had whipped up. The Polis camped outside the fence had seen the magic snowfall. Rejoicing, their shaky vids capturing snaky tendrils of frost-laden fog rolling down Kea's flank under the moonlight. The story of the miracle of the snow goddesses had spread like wildfire.

Eenie wore white, blue, and green lycra overlaid by a gauzy robe of pearlescent white. Surrounded by the buzz of newly excited supporters and her joyous coterie – the three other snow goddesses, her allies against Pele and her consort, wherever he was.

She was ready, but nervous. This event was why she'd been hired in the first place. There weren't many astronomers in the world that had Olympic-level sledding experience. She hadn't been able to practice at all since last year. She was willing her body to remember how to rest on the holua. How to steer with minute shifts. Her headdress was a concern. It was ornate, elaborate, capturing the light of the sun and reflecting it like a disco ball. It might drag, though it hid a crash helmet and a collapsed neck brace that would inflate on impact over 3 gees of acceleration.

Around her waist she carried protein paste and electrolyte pills. Her shoes, easily the most expensive part of her kit, had reactive soles that would adjust to the terrain, mimicking anything from a hoof to the pads of a tree frog, sublimely useful in the wide range of treacherous terrain that was between her here, at the highest point on the island, and the sea. She'd be running on everything from unstable lava fields filled with clinkers of hard iron and obsidian glass, surgically sharp, to moss-covered rocks in the bogs of the jungled lowlands. Every bit of terrain would carry the danger of fissures large and small, shallow and terrifyingly deep.

That equipment, and the link in her ear, was all she had. She and her competitor would each be followed by a platform that would monitor their progress but not interfere. Eenie's was already in position above and behind her. Thinking of it made her look towards a bank of screens. She could see herself – her back – on one of them. On another large screen, Stephens, her competitor this year, from the volcanologists' compound. Stephens looked pissed, jabbing her finger at the screen that Eenie herself was on, at the glistening snow behind her, her free hand going to her ear to keep her link from falling off. Some of the other geoscientists were even more strident. But the judges over on Loa seemed completely unconcerned, offering nothing, and Eenie could see the countdown continuing in the corner of the screen. Three minutes. Less.

Now two minutes. Eenie got into position. She sat on the front half of the holua and gripped the two rods that were the starting line. She glided the holua back and forth over the snow, the friction glazing it into ice. Rogers came over as she concentrated on the terrain below.

“How we doing, tiger.”

“Fine, good. We've got a chance, don't we?”

“More'n they know, goddess.”

“Don't call me that, Dave. I'm just sitting on a sled. It's just fucking gravity.”

“Whatever you say, oh mighty one.”

Eenie snorted. Ninety seconds.

“Listen. This is important.”

“What?”

“You see how long the snow chute is? Where it ends?”

“What is it, maybe half a klick?”

“Yes. Four hundred and eighty seven meters, actually.”

“Okay. What about it?”

“Stay on.”

“What do you mean?”

“When you get to the end of the snow, stay on the holua. Don’t get off. Keep going.”

Eenie turned fully to him. Sixty seconds. “What?”

Rogers flicked his eyes at the holua.

“Whatever you do, Eenie, keep going.”

Thirty seconds. Rogers was being pushed back by the white gloved referees from the Reaffirmation. “Be fine,” he said, shouting. “Be magnificent!”

Ten seconds.

Go.

A holua is an ice skate. Well, maybe two ice skates, strapped together their blades slightly overlong. Only your midsection, your center of gravity, your chi or whatever, touches the sled at all. Everything else – elbows, knees, heels, the back of your head – is cantilevered out over the front and back of the sled, unless it is smashing into the ground after one of hundreds of lumps or pebbles pops it up into the air. The first art of the holua is staying on, a skill few have ever mastered – Eenie being one, and thousands of years of fanatical Polynesians, for another, back when there had been snow on the tips of dormant volcanoes.

Close to the summit, Kea was almost vertical. Eenie was halfway down the chute in thirty seconds, her speed exceeding a hundred kph in the first five seconds of the race. She watched for lumps in the thin skein of snow – almost certainly rocks – and worked on the second art of the holua – steering. You steered by micro-shifting your weight from one rail of the sled to the other,

the slightest over-correction meaning disaster. Too far and the holua was gone sideways, with Eenie continuing straight down the chute. The holua creaked, its left rail popped up over a rock. Eenie cursed, and stayed on.

The end of the snow was coming up fast. It took all of Eenie's will not to reach out with her hand or dig in her heel to power down the run.

"Dave?" she said, her diaphragm, vibrating with the jarring descent, making her voice warble.

"We've got you, Eenie," he said. "We're good. You're at full power. Feel the humming?"

She couldn't feel anything but the terrain, but she nodded anyway. "Lead time?"

"You're already 38 minutes ahead and climbing fast." The bumping over pebbles and bigger rocks was turning into a constant vibration.

"Dave. I'm accelerating."

"It's the supercooling. That's what's going to carry you past the edge of the chute."

The end of the snow was coming. Then it flashed by her, and the holua shot out onto the dirt. The holua didn't slow. She was sledding over bare ground, not slowing at all.

"Can I steer?"

"Umm... maybe a little. Try leaning."

She shifted her weight to the left rail and felt it bite down into grit. The holua skewed in that direction. She micro-shifted back to center and the holua tended back, but not all the way. She let her right hand drag in the dirt behind her, got the sled straightened out, pointed back down.

"Steering is limited," she said.

“Just hang on, Eenie. You might make it through the moraine, maybe all the way to the tree line.”

“What happens when I get there?”

“What?”

“How do I stop?”

“Uh, stand by.” Eenie could hear Rogers shouting at somebody, then he was back on.

“We’re going to try to remote-halt the supercooler... Clinker!”

Eenie raised her head and looked down between her toes. A meter-tall rock loomed downrange. Eenie threw her weight to sail past, but the holua, rocketing down, frictionless, responded sluggishly. Eenie put out her left hand, grabbing for dirt. The move pulled the holua further to the left. Just enough for the clinker, black ejecta from one of Maunakea’s ancient eruptions, to fly by, close enough that Eenie pulled her right side in. Air pressure rocked the holua as she raced past.

“We’re shutting it down in ten.”

“Do it now, Dave.” Another clinker shot past. Another. She was already in the rock field. No way to navigate it at this speed.

“Okay. Hang on.” Black lumps on either side of her. One hand, then the other, in the dirt. Eenie felt the hum below her lower back increase, then snap off. The holua’s rails sank into the grit, and Eenie quickly ground to a halt. She rolled off the sled and splayed out, panting, her face to the sky.

“Three clicks, Eenie! And 2200 meters of elevation. Your lead is... you’re an hour and forty ahead!”

Eenie continued to breathe and look up. A long, curved tendril of cloud reached out from somewhere north and blotted out the sun. Saachi was making itself known.

“Any kickback from the judges?”

“Ka’mi was stoking up the crowd the whole time, having them chant, sing. Looks like they’re reading it as answered prayers.”

A hissing sound came from under the holua. Eenie rolled away from it, up into a sitting position, then she stood, a little unsteadily at first, and started stiff-walking down to the tree line.

“Eenie?”

“Huh?”

“You forgot something.”

She stopped and turned back. The holua was on its side; the hissing had stopped. This was, technically, a holua race. She had to cross the finish line either on or in possession of her sled. She trudged back uphill, and bent down to get the sled. She lifted it – yes, it was heavier than last year’s version.

“Top speed?” she asked.

Her link responded before Rogers could.

“One hundred thirty three kilometers per hour.”

“Shit,” she and Rogers said at the same time. Not a luge record, but maybe a holua record.

Her monitoring platform, trailing behind, finally caught up with her. Eenie took it as a sign to move on.

“Lead,” she said, and the link responded with one hour and thirty eight minutes. She’d lost a minute or two. Her competitor was probably pounding down one of dozens of fields of

ejecta, her own holua strapped to her back, trying to make up the time. Eenie turned back downslope, started hopping down sideways, kicking up dust. Her pace accelerated as she cleared the end of the rock field and the ground flattened out. By the time she hit the trees her hops became lopes. She flashed into the greenery, disappearing from the hover vid.

Chapter 7 - old man trees (*na lā'au kanaka kahiko*)

Eenie let herself run flat out. Her legs pumped, her blood super-oxygenated. She knew this part of the route well. Her feet knew just how to land in the loose scree, dry as powder. Twisted, dwarf trees flashed by her first, gnarled as those damned old reds from the Poi Poi.

Eenie let gravity do the work. She minimized contact with the ground, using the pads of her shoes to nudge and steer more than provide force. If she did it right, didn't run into any obstructions, she could cover a lot of ground.

She was going to cover a lot of ground. She was feeling good – great, actually – for the first time in weeks, if not months. Oh, that holua ride had been so sweet. Eenie hooted as she leapt through the thin skein of dry trees into the upland forest proper. She'd been on the rails, sweet mama, one more time. Maybe the last time, who knew, but damn had it been fine.

She had this. No way would Stephens catch her.

The holua was the only reason she agreed to this. All of them – Rogers, Ka'mi, Kathleen – probably knew that. She was a junkie for the chute, had been ever since Kaolo moved her and her siblings out to Colorado the winter she'd turned fifteen. Haru had known for sure, back when they'd met and started circling each other. She'd admired him, a Japanese-American who'd renounced his Merican citizenship, pledged to the Reaffirmation. One of the first. He'd taken the minority view on the telescopes. He knew they meant something for the new nation, that Hawaii needed to show the world that it wasn't some new nut-job regressive fortress state. He had worked Eenie, to some degree. She had worked him, too, and they'd come up with this crazy plan. Their relationship, private, frenetic, had been one more sacrifice to get them to the future. To right here and now.

The trees started to close in around Eenie, dimming the morning daylight. Early still. Eenie's drogue platform had caught up with her, but it had to veer over the tops of the trees to keep pace. Eenie stared at the clock in her link's display, willing it to add more time to her lead over Stephens. She knew Stephens was running flat out, too on wide open, though rockier, terrain. Yes! Another second up.

If her stepfather hadn't moved to Colorado, after Eenie's mom left him and all three kids. He'd taken to the snow, and his enthusiasm had rubbed off on Eenie. If she hadn't taken to hiking up dormant ski trails that summer, stumbled on that luge track, seen the girls training on the rolling carts. But she did find it, and once she got on the cart she loved it, staying out in the metal practice chute all summer, then on the rails that winter, and every winter after.

She had been good. The best in the world, by goddess. She laughed. The best downhill sledder in this melting, drowning world.

The forest was dense now, the ground slick with moisture, the humidity slammed up to one hundred percent. The soles of Eenie's shoes puckered like the pads of a jungle lizard. She didn't slow down.

She'd been good, alright – good enough to qualify for the '26 Olympics. She probably would have placed, maybe even gotten the gold, and wearing that medal around her neck might have been enough for her to walk away from sledding. She would have laughed Haru's idea down. But things hadn't turned out that way.

She and the rest of the contingent from the lower 48 had shown up in Anchorage for the opening ceremony in '26, along with the teams from the two dozen or so other countries that still participated. She'd marched in, a Merican still, at that point, her costume almost as garish as what she was wearing now, when the Inuits stormed the stadium. Everyone thought it was part of

the show, the men and women in traditional garb, streaming down the stands, until they saw the guns. They'd taken all of the teams hostage, all except the Alaskans and the Siberians, who had staged a synchronous revolt on the other side of the Bering. That was the whole reason for the uprising anyway. They wanted to carve out a new state, Transalaska, they were calling it, and the Inuits on both sides of the Pacific would cash in on toll revenue from the now-teeming Northwest Passage.

The Last Olympics, they called it, even though not one event was held, not one medal awarded, and no one, not even Eenie, got to compete. She had been so close. Instead, she had been stuck in a room of one of the hastily-erected hotels at the edge of the port city. She and the rest of the team – the rest of the teams, probably – were sitting there for weeks, the only thing on the screens Inuit propaganda. The short daytime hours revealed scores if not hundreds of cargo ships sitting at anchor in the bay, too scared to move. Alaska had commandeered the Coast Guard fleet. Gunboats, rumors of submarines. They had shut down the maritime traffic for one-quarter of the globe.

Then Kal. She had walked through the door like she had been just down the hall, humming to herself, how's-it-going-sis to Eenie. She'd pulled some kind of tool out of the housekeeper's uniform she'd been wearing and pried the gasket from the room's curtain wall, pulling in the loose glass, setting it down delicately on the vinyl bedspread. A platform had sailed in. Kal had shooed Eenie on top of it while she set up some sort of device on a tripod. In shock, she complied, mounting the platform, protesting all the while. Kal finished setting up the machine and flicked it on. The device started humming, and Kal seemed satisfied. She muttered something into the lapel of her uniform, and Eenie floated out into the night.

She hadn't known all of the details of the rescue operation until later. She'd gotten a quick call out to Paul before the communications were blocked. He had called his Uncle Flash, a long-time merchant mariner, who got in touch with his friend Kaolo, who called Kal. She'd taken an immediate leave from whatever top-secret duty she was on at the time, sanctioned or not. All Eenie knew, sailing out of the open window, was the Alaskan night, dark as interstellar space, but dense as a nebula with snowfall. Almost instantly she couldn't see the lights from the hotel or the city behind her, the inlet dozens of meters below her, couldn't even tell she was moving. Nothing else was out there. The Inuits had grounded everything. Somehow Kal had flown Eenie and, shortly after, the rest of the Merican contingent to an empty container ship rolling out at the windward edge of the ice-chunked harbor.

Afterwards, they'd sailed south, escorted by a brace of submarines. They steered clear of the West coast, where the navies of three or four countries bristled. They sailed south, all the way to Hawaii, and there Eenie stayed, and Kal stayed with her.

Eenie felt a lump in her throat as she hopped over a decaying tree trunk. She couldn't have done any of this without her sister. It didn't matter that they weren't related by blood, or that it seemed nothing had been right, exactly, since Eenie's mother left them when she was fifteen, or before that, when Kaolo had been out at sea, and her mother's drinking had gotten bad. It had been her and Kal. When Kal was young, Eenie looked after her, but Kal had grown up fast. For a long time, now, Eenie depended on Kal. Kaolo had stepped up, yes, but Eenie was almost grown by the time they moved away from Kentucky. The last few years of high school, in Colorado, had sailed by. Whenever Eenie wasn't in school, she was on the luge.

Flying through the Ola'a Forest, all Eenie could think about was that night in Anchorage, riding that makeshift platform, the fat snowflakes blocking out views in any direction, muffling

the sounds of the ocean and the moored ships, was probably going to be the closest thing to sledding she'd get to experience, maybe ever again.

Eenie had nothing against the Inuits or their cause. The Hawaiians, either. They were taking back what was theirs, determining the course of their own lives, as much as anyone could in the rising tide of climate change. She wasn't happy about being a pawn, not then, and not now. But she would – she had – put up with a lot to keep running the chute.

Chapter 8 - Volcano (*lua Pele*)

The terrain between the lower flank of Kea and the flat shoulder, no wider than a side table, that Volcano crowded itself onto, was rough, steep, and completely blotted out by the mist-swathed green.

It was quiet in here. A path wound its way down to the town, ancient, once used only by priests and supplicants of Poliahu herself. But on an island, any path carved out by some animal or pre-literate tribe was etched out for all eternity. There wasn't anyone along the path, probably because no one had expected her downslope so soon, almost two full hours ahead of schedule. The path grew slightly wider, and then turned into stairs, first of volcanic stones brought in and laid, so black they looked painted, then, further down as the slope of the land grew more vertical, hewn into the living face of Kea. Volcano's main street dead-ended at the bottom of the stair. At least the white devils that laid out the tourist town had gotten that detail right.

Volcano had been made up out of whole cloth by some Merican developer or other, laid out insanely like a normative suburban tract. As she stepped onto the street, the first horizontal stretch of land she'd touched, Eenie began to trot, then to run flat out on the dark pumice road. She whizzed by ranch style homes. The first ones she passed were closest to the forest. They'd been engulfed. A lump swelled in Eenie's throat. The house her stepfather had built, the last thing that tied her, well, to anywhere, probably looked like this, caved in, repossessed by opportunistic flora. Where was she from, now? Here? She didn't care how much Hawaiian blood she had. The kanaka wouldn't even look at her.

Further into town, fewer houses had caved in rooves, rusty mailboxes, and rotted little fences. Many looked lived in. The Hawaiians that recolonized these ranches had turned them inside out, yanking out the double-glazed windows, replacing asphalt shingles with more

sensible thatch, and pulling their kitchens out on the porches. The new homesteads were the inverse of the houses she'd known back in the states, but they made sense. Energy hogging split-system coolers had been replaced by natural ventilation. Yards were no longer alien bluegrass from imported Virginia seed, but thriving kitchen gardens. The ditches out front that once caught stormwater clogged with oil and brake dust were now filled with tiny *lo'i* – taro root ponds. While the rest of the world was burning up, the kanaka were firing up centuries-old traditions, making the most of their island's fertility.

The Hawaiians hadn't turned their backs on technology entirely. Her platform was dogged by a cluster of other drones, some privately owned, others covered in the insignia of a dozen news channels. Eenie could see vid screen lights through the fabric window coverings, could hear her own foot pads echoed back at her through open windows. They pulled their shades aside to cheer or yell at her, most of them whole seconds late. Eenie had already passed by.

About half a klick down and she'd turn onto the highway and blow past the mango bar at the far edge of the village. Down at the intersection there was a crowd. Faces turned towards her, she could see some people pointing. The ones she could see wore white – Polis. This was a relief, especially considering what happened the last time she'd been in town. As she got closer, she could see the white robes had their backs to her, their arms outstretched, pushing against the people behind them. Only the thin front line was her supporters, she could now see, a thread trying to hold back a tide of red. Pele's color. Everyone had been so sure she would lose this year. She saw men's faces, the ones so sure she would fail, ugly now, turned down, pissed. The faces of the Polis twisted to see her. Some of them turned, reaching out, their hands filled with offerings – fruit, coconuts with the top macheted off and a cane straw down to the milk, full

waterpods. She slowed as she neared, close enough to touch hands. The reds had offerings, too, but they didn't hold them out to her. Something flew past Eenie's shoulder. A de-skinned mango, festooned with tiny flowers, spattered on the black gravel behind her.

Eenie stopped, shocked. Everyone grew quiet. No one had broken the taboo before. The race was sacrosanct. They all looked at the ruined fruit. Then, shouts. Then, the sky dimmed. Fruit followed the parabola of two forces – velocity and gravity – moving towards Eenie. She backed up, then ran back up the way she had come. She could hear the legs of the reds pounding, grinding the gravel. She turned down an alley that ran parallel to the highway, hoping the adrenaline spike on her monitor would summon security, hoping to loop around the mob. She felt wet things hit the holua on her back, juice spraying her robe, pulp sliding down her ass. Something hard slammed against the sled. A coconut, probably. Eenie was suddenly thankful for the weight on her back.

She turned right again, headed towards the highway, a narrow track only wide enough for one vehicle. If she could make it maybe she could gain some distance, leave this bunch behind.

Eenie made it to the highway and looked to her right, towards the intersection a block away. Most of the reds had followed her. The few lavaheads left down there, a block away, were corralled behind the whites, their fury palpable from this distance. Her pursuers had strung themselves out behind her, almost none of them keeping up, though the more athletic were closing in. In front of Eenie was a steep drop-off and the leading edge of the lowland jungle. So she turned left, downslope, towards the edge of town. She picked up speed, and the voices behind her grew softer. The road curved to the left, and as she swooped past the Poi Poi she saw another group of reds clogging the track about 20 meters down. She stopped cold.

This wasn't supposed to be happening. No one was supposed to get in her way. That was part of the rules. She didn't see any officials around. She looked up at the drones circling. None of them were security. What was going on?

Behind the clog stood another man, taller, bigger, angrier. It was him, the warthog man. She snapped a shot of him with her link to send back to the observatory.

The sounds of the crowd behind her grew louder again. She turned and looked, saw faces straining with exertion, others, further back, walking, puffing, holding their sides, but still coming.

There was nowhere to go. Nowhere but the slope and the green. The warthog read her intent, spurring his knot of reds up the track towards her. She went in.

The lavaheads that pushed her into the jungle stood at the edge of the track above her and hooed and haahed and Pele'd and clapped. Hoo haa Pele clap. Some had turned the chant into a perverse sort of line dance. Every once in a while something would sail through the foliage towards her. She could dodge easily, but she was more than a little concerned that she couldn't get her platform to move between her and the crowd. It wouldn't answer her summons, instead hovering outside the canopy. Maybe it had been damaged.

Eenie couldn't get back up to the road. As she struggled through the brush on the steep slope, roughly parallel to the road, the crowd easily matched her, a living wall. She'd lost ten or fifteen minutes of lead here, assuming the race was still on. This sort of interference should justify calling the contest, or at least suspend it.

Eenie backed down the steep slope, first to put the trees between her and the sporadic hail of hard fruits. Then she just kept going, sliding and jogging, running into tree trunks to slow her

descent, a plinko ball in the rainforest. The crowd sounds got thinner, quieter. The high frequency consonants dropped out first: ooh aah e'e clap! Then as she moved farther away the lower volume vowels: ooh clap! Ooh clap!

Eventually she was far enough away that she couldn't see them anymore. Here the ground was far more vertical. Trees came straight out of the side of the cliff before turning sunward. She was jumping from one tree to the next, crashing through leaves like a squirrel in the kudzu back home.

She touched her link. "Who's on now?"

"It's Mele," Mele said.

Eenie panted into her mike. She leapt down one more time to a trunk with a fork in it. She pulled her holua off her back, straddled it across the open V, and sat down for the first time since the holua run.

"Hi, Doc. Guess you're looking for a new route." Clap!

"You're telling me this thing is still on?" Eenie let her legs dangle out over the opening below her, stretching her ankles and toes.

"That's what it looks like," said Mele. "The cameras are still rolling. Stevens is making time. Your lead clock is counting down." He let out one short bark of laughter.

"We haven't called foul or something? Interference? What's going on here, Mele? There was no security in Volcano at all. No officials. No drones."

"I – we don't know. Ka'mi has been on with the folks in Lahaina. He got the Reaffirmation to agree to send some militia down, but that's it. It didn't sound like they wanted to do it, though." Mele hesitated. "Your, um, contact has been calling."

Haru. I damn well want to talk to him, Eenie thought. “My platform. It didn’t trigger its security protocol, either.”

“We don’t have an answer right now, Doc. We are aware of the telemetry problem, and we’re working it.”

Something was up. She knew it. The volcanologists had been so sure of themselves.

“Stay on, Mele. Find me a route.” Eenie tapped the link, opening another line to Haru. Another tap and she muted the line to Mele.

He picked up almost at once and started talking. He was walking fast, his camera angle bouncing, trying to compensate.

“They sent *kahu*, Eenie. Armed guards. To my office. Forced me out. Said I’m not kanaka, the bastards. Kanaka. Like that means something. I didn’t fly in from Vegas last week. I don’t have red fucking hair. I was fucking born here. They’re moving, pushing hard now. I don’t know why for sure.” Haru was talking fast. “But there’s something else behind this. You’re an excuse. A symbol. Someone’s making a power play.”

“What can you do?” Eenie asked.

“Do? For you? Eenie, I was almost arrested. If some of the sympathetic *alaka’i* hadn’t stepped in...”

“So what can you do?” Eenie said again, her voice flat, her feet swinging, her head down.

“Jesus, Eenie, I...” Haru sighed. “I’m working it, okay? I’ve got calls to most of the other *moku* leaders, the ones that don’t have their heads up their poi holes. I’m headed to the heiau now, to try to persuade Ke Kahuna to put controls back in place. Get the referee drones back on line at least.”

“Why aren’t you saying the race is called off?”

Silence. Eenie waited. It's what you did with Haru.

"Eenie, I... there's nothing..."

Silence again. The *lehulehu* had stopped clapping.

"There's nothing to do but keep going. You have to keep going. I don't know what will happen if you don't. You have to give me time to work this. Lots of people are pissed. I might be able to turn this thing around."

Eenie sighed. "Okay."

"You've got to give me time."

"I said okay." She pulled in a wavery breath. "This is wrong, Haru."

"I know, Eenie. But realize: somebody wants you out. Gone. You know there are lots of kanaka that want the telescopes ripped out and thrown down the mountain. They'd do it by hand if they could. You know they'll do it. It's '32 all over again."

"Yeah. I remember, Haru," Eenie said. The mob at the gate to the main observatory array. They'd already torn down the TMT. Kal's voice in her ear asking her to let them shoot. That's where this whole business started.

"Don't give them the chance."

"Okay."

"Your work is too important."

"I said okay, Haru, Jesus."

"Uh, Eenie?"

"Yeah, Mele."

"Got your route. Your link should have it now. Good news is you're going straight through to the hiking trail and then over to Kilauea. That shaves off four point three clicks."

Eenie examined the map. She'd be shifting over to Stevens' track. Lava land.

"Lead time."

The link answered before Mele could. "One hour twenty eight minutes."

"Lead time loss estimate for new route."

"Fifty three minutes, plus or minus nine minutes."

"Shit," Mele said.

"Shit," Eenie said.

"Get going," Haru said. "And tell Ka'mi to call. I'm at the temple."

Eenie heard hollow pounding over her link before Haru's line went dead. Mele signed off to relay his message to Ka'mi.

Nothing left to do but go. Eenie jumped to the slope beneath her perch. She reached up and threaded the holua through the two trunks, strapped it to her back. She was off.

Chapter 9 - the hard rain (*pa'akiki ua*)

She was shedding altitude fast, using her arms as much as her legs, hoisting herself down from one ledge or branch or trunk to the next, a lemur swinging herself. Her shoulders burned through the anti-lactosis treatment. The blip on her map wasn't moving forward too quickly, though Stephens was making regular time on her route. She continued to lose lead.

This is bullshit, she thought. Continuing the race seemed like acquiescence, like everything that had happened was okay. But Haru was probably right. There was too much at stake to quit. It was his and Rogers' and Ka'mi's job to work the problem. Eenie's was the camera. The song and dance.

At least the techs had re-leashed the drogue platform to her link. It had sailed back down while Eenie had been arguing with Haru. She'd taken the opportunity to refill her water bulbs. Now, it matched Eenie's descent easily, gliding around larger branches and snarls of vine. It was programmed to stay out of reach, but well within camera range.

She was on the vids again, and everyone wanted to chime in. She could see a stream of comments from her fans in the lower left of her link display, jubilant, ecstatic that their patron had jumped ahead. Fair or not, the race this year turned out to be well worth watching.

Dropping down through the dense foliage, her mind turned back to the mob in Volcano. The anger she could understand. She'd had to face disapproval from the lavaheads before. She'd been booed, she'd even heard that irritating Pele chant before. The race was somewhere between a sporting event and a religious ceremony, and it brought out the worst fanatic fervor of both.

No, Eenie's hesitation wasn't from the fans, not even the thrown fruit. The whole thing felt like an ambush. The ugly man – she was sure she'd seen him toward the back of the crowd. Was this his doing? Where had the race officials been? The Reaffirmation security? Either

someone had ordered them not to be there, or they had been there, their uniforms concealed under blood-red *kihei*.

She landed on another tree trunk jutting out from the steep slope, gripping it with hands and feet, gasping. The reason was clear. She wasn't supposed to win.

She twisted her body around so she could lay against the thick trunk on her back. The canopy of leaves was thinner here. Looking up, she could see through the understory. A swarm of drones of all shapes and sizes was out above the tree line, likely hovering just outside the radius prescribed by race officials. Only the single team platform could get in close. The unexpected drama had swelled the size of the drone swarm. Everyone wanted to image Eenie, see how she was holding up. As she lay there, catching her breath, she could see more and more drones arrive.

It had been decided, she thought. She wouldn't win. The astronomers were out. That's what Haru had been talking about. The other side – the purists, nativists, whatever – had moved against Haru and his faction at the same time. He'd been as surprised as she was.

She raised her hand to open a channel back to the observatory, but she hesitated. Rogers and the rest of the team, her colleagues, everyone up there on Kea was smart, none of them distracted by trailblazing in one of the most inhospitable environments on the planet. Or flying fruit. Her thoughts were falling into place. Rogers, Ka'mi, all of them knew about it, and they weren't broadcasting. That means they either thought communications were compromised or they didn't want to make this struggle public. Keep it below the waterline.

Which brought her back around to her earlier conclusion. She had to let them work the problem. Much as she felt like she'd been personally slapped in the face, much as she seethed, the only thing she could do was to take her anger and put it into the run.

She rolled off the right edge of the trunk when her platform rammed the other side. Chunks of bioplastic flew towards her. A shard slid by her face, scribing a stinging line across her cheek.

She landed on a thinner branch that swayed under her weight. She looked up. The platform was embedded in the tree above. Somehow it wrenched itself free. The collision had gouged a big U-shaped chunk out of its leading edge. She commanded it to stand down. Instead, it swiveled down towards her voice and accelerated.

Eenie couldn't think, only react. She dropped again, hanging from the smaller branch she'd landed on by her hands, glanced down to look for another landing spot, then let go. The platform skidded along the top of the branch where her hands had been and disappeared into dense foliage. She could hear it crashing around but she couldn't see it.

Another crash, off to the right. A smaller drone, smoking, dropped down from another direction. Another one, streaking towards her, wobbling as it pinged off branches. Eenie ducked, and it sailed over her. Glancing up through the hole the drone punched in the canopy, she could see the sky darken as the dense constellation of drones constricted, descending towards her.

Eenie's link crackled. It was Mele. "Go, Eenie! The network's been jacked. Get cov..." He'd been talking fast, but his words fuzzed out into a high pitched squeal before the link went dead.

She moved, trying to keep distance and vegetation between her and the descending drones. She had no idea how much further before the downslope flattened out into the lowland forest proper, but every meter of vertical helped.

She dodged a few early arrivals, but soon had to give up trying to judge the drones' vectors. There were too many. Her descent became more of a controlled fall. The dense jungle

did provide good cover. Many of the drones were too light to punch their way through the thick leaves and tough vines. A few of them, the larger ones, made it through. She got hit once, then a second time, each time crying out. Though the weaponized camera drones weren't big enough to cause any damage, they could knock her off balance.

The link was out, but the text window kept scrolling. The well wishes and you-got-this-es turned quickly to WTFs and Hell Naws, then to get those M-Fers and F-the-lavaheads.

A third drone, this one bigger, with official markings, hovered in front of Eenie, sizing her up. Just as it started to come at her, two other drones rammed it. The second one jammed in the big one's rotors. The conjoined mass flipped over and dropped from view.

The Polis had gotten in the mess, disabling their drones' safeguards, bringing the fight to Eenie's attackers. Soon the jungle was filled with the sounds of shattering plastic. Damaged drones and bits of machinery fell like hail all around Eenie as she made for the jungle floor.

Sooner than she thought, Eenie was at the bottom of the kilometer-tall slope. The sounds of the battle had lessened, though she could still hear the whine of drones maneuvering out over the canopy, and the occasional crash of one or another falling through the canopy.

Later, she would learn that the Polis, enraged, staged a drone counterattack against Stephens. Only then did the race officials finally step in, imposing a strict no-fly cordon over both racers for the remainder of their routes. Right then, though, as she started off along the sodden dead leaves underfoot, all she could do was marvel at the sudden quiet. She was alone.

Chapter 10 - devil's throat (*ka'ā'ī kiapolō*)

Eenie finally made her way out of the jungle to a trail. Hours now and she'd seen no one. The trail had emerged from the jungle to a naked lava flow. The south flank of Kilauea was covered in billowy smooth-looking lava stone the Hawaiians called *pahoe'hoe*. The kanaka had dozens of different names for cooled lava, like Arctic populations had for snow. Except for the occasional scraggly scrub, Eenie might as well have been walking on the moon.

The climate had changed along with the terrain. The air was dry, body-temperature warm, the clouded-over sky only a shade or two lighter than the charcoal landscape.

The trail Eenie was on was carved by the US Park Service decades before for tourists eager to traverse Kilauea's lava flow back in 1959. Pele had been angry then, geysering magma 500 meters into the air, forming deep lava lakes, incinerating everything in its path. The scar tissue still remained. The *pahoe'hoe* was interrupted by massive clinkers and sharp hornitos. The whole area was littered with Pele's tears, sprays of molten volcanic glass that had cooled in the air and sleeted down like solid rain. The ground was treacherous; it would be easy to turn an ankle here. Worse, the ground below the lava field was unstable. Fissures small and large puckered open on both sides of the trail. No telling how deep they were. Some steamed sulphuric gases. Eenie had to keep her eyes on the eerie landscape.

She thought about her holiday to the Yucatan, back when she'd been at Arecibo. The whole peninsula had been pockmarked by cenotes, sinkholes acid-etched through the soft limestone substrate. There, they had opened directly to the aquifer. The fissures here opened directly to magma. The Mayans had sited their cities and temples around the cenotes. Even the adaptable Hawaiians had never built anything out on the lava fields, not until recently, anyway. As she pounded down the trail, Eenie passed a short dry-stacked stone wall, the boundary of one

of the kanaka-led communes set up on the edge of the barren lava field. A few meters in, a short, squat drone was chewing its way through the lava, accelerating the natural advance of the island's opportunistic flora, masticating the silica matrix to extract trace minerals. The robots naturally enriched the soil, increase the yields of traditional crops like breadfruit, sweet potato, and 'akala and 'ohelo, native wild berries. Here was another example of technology living conjoined with millennia-old traditions. No one was in evidence, all probably indoors, transfixed by the race.

Eenie was tired. The light in the sky was dimming. Evening was coming on. She checked the weather through her link. If she kept pace, she could make it to the finish by tomorrow noon, maybe beat the worst of the storm. She was about an hour ahead of Stephens.

A rusty sign signaled she was approaching the Devil's Throat, a wide, almost circular opening, called such to entice tourists to the area. The crater was down a track to the left of the main trail. As she rounded a curve she saw something on the road ahead and skidded to a stop.

Pigs. A drove of them.

Just beyond the fork that led to the throat the trail left the lunar lavascape and plunged back into the lowland jungle. Just there, at the edge of the green, the pigs stood, lined up straight as a picket, all facing directly towards her.

Eenie stood and stared, her brow crinkled and mouth wide open. She could see the lead time counting down as she stood. She tapped her link.

"Dave? Are you seeing this?"

"Uh, let me get to the screen." Eenie could hear Rogers tapping.

Eenie was maybe fifty meters from the line of pigs. They didn't all look the same – some were bigger than others, some very hairy, some not so much.

“Hmm. Weird,” Rogers said.

“You got anything useful?” Eenie said.

“Just that I don’t like this.”

“Poliahu?” Ka’mi broke in.

“Do not go near them. It looks like they are staking out territory.”

“You’ve seen this before?”

“Not exactly,” Ka’mi said. Usually a single boar will stand to defend his ground. Never a group like this. They look like...” Silence. Eenie waited, catching her breath, until Ka’mi’s voice came back. “Yes. They appear to all be males. Very strange...”

Ka’mi’s voice became thin, fluted. That strange static, the static she heard in the Poi Poi, was coming back.

“I’m losing you,” Eenie’s voice shrilled as her heart started pounding.

“You are being...” Ka’mi’s voice degraded to a low buzz, then a click, then nothing.

“Telemetry lost,” her link reported. “Lead at time of loss forty-eight minutes and decreasing.”

The pigs started towards her at once, moving in unison like a flock of sea birds.

Eenie had to choose –move straight towards the pigs, go back the way she had come, or go down the track to the Devil’s Throat. The fork in the trail was between her and the pigs. If she ran she would probably make it. Striking out over the lava field was no good. The pigs could travel more quickly over the loose tephra than she could.

If she wanted to keep going, she had no choice. She sprinted towards the pigs, beating them to the fork. She turned down the side trail. It was narrower, less traveled. It went down a short incline and leveled out.

She turned around, jogging backwards, to look behind her. The pigs had reached the fork, and reassembled their line like they were soldiers heeding orders. As she watched, they moved down after her, some of them vanishing into the scrub on either side of the trail. Eenie turned back around and ran.

All too soon Eenie had to skid to a stop again. The edge of the throat loomed. She turned around. The pigs were still coming. Would they charge her? The one in the middle was big, probably outweighing her. It could easily push her over the edge. Inside some part of her was laughing at this, not believing what was happening, but mostly she was in shock, reactive.

The trail swung around the chasm to the left. It gave her an idea. She could use the pit as a shield, keeping close to the edge, so the pigs couldn't flank her. Once she got to the far edge she could trail blaze again, strike out over the scrubby badlands, maybe get out of the drove's territory. If Ka'mi was right, that is.

She ran down the path. It soon petered out, but Eenie didn't stop. She went straight into the scrub, holding her hand in front of her face to keep the thin branches from whipping into her eyes. Her forearm scraped its way through the scratchy vegetation. Her robes shredded, her holua snagged. She could hear the hogs grunting behind her. She couldn't outpace them in the dense brush. They were designed for this environment, low, torpedo-shaped, opportunistic, the sharks of the jungle. She expected a snout to emerge from the bush at any moment.

She veered right towards the edge of the throat, hoping the bush would thin out, hoping the cliff edge would hold. The move worked. Eenie only had to wind around the occasional bush stretching out towards the light over the drop. She picked up some speed before skidding to a stop. Some of the pigs had gotten ahead of her. She had been encircled, trapped. All around her the bush was moving. Snouts were appearing through the leaves, then heads, then whole bodies.

The pigs formed an almost perfect semicircle around her. She took a step back, feeling the ground slide from under her left heel. The drove moved forward one step in unison. This was no random pack of territorial animals. This was looking deliberate, the drones all over again. But how were the animals being controlled? And who was doing it?

That was all Eenie had time to process before the pigs charged. Eenie had one last idea. She got down on the ground, combed her fingers through the thin branches of two bushes on either side of her. She hoisted herself over the edge of the cliff, hoping it wasn't completely vertical. To her relief her left foot found a small ledge. The pigs were maybe five yards out. Eenie tore her eyes from them to look down between her feet. Even further down was a slightly wider ledge. The surface vanished from view as she lowered herself down to the shelf. Eenie could hear snuffling and crashing, feel the vibrations of the pigs moving through the bushes above her. Rocks and dust pelted her. But they didn't try to come down after her.

The upper edge of the throat, where Eenie was, flared out. It only became completely vertical farther inwards, as if it were a funnel. Eenie could probably navigate this slope until she got to the other side of the throat. She got moving, hoping the pigs would lose interest, almost certain they would not.

The going was agonizingly slow. She knew she was losing time fast. She could hear them up there, grunting, and every once in a while she'd see a flash of coarse boar bristles. The pigs were pacing her.

Fifteen minutes later she had circled around to the far side. She stilled herself for a minute. Her fingers and toes burned from their tight grips. She listened. Things were quiet. Maybe the pigs had wandered off, she thought. Maybe it had been a territory thing.

She pulled herself up just enough to be able to see over the edge. There was a small clearing on the surface just above her. At the far end, but not too far away, stood the pigs, in a line preternaturally straight. They didn't move. She knew if she got back up on the surface that they would charge. Eenie had no moves left, nothing to do but cling to scraggly roots and wait, hoping someone would come looking for her.

Eenie heard something behind her. She craned her head around. A platform hovered out over the drop, military, it looked like, maybe five meters behind her. Its edge swiveled until its camera focused on her. Then its attitude changed so it could peer over the edge of the pit. The platform's gun port opened up. Eenie slid back down to her ledge. Flechettes poured out noiselessly over her, flitting into the foliage over the edge of the throat. Eenie could hear pigs screaming, their squeals echoing over the edge of the pit.

Eenie's heart raced. Someone had gotten this drone through. Military grade. Haru, maybe. It seemed like his style.

A deep shout of rage came from the other side. Then there was a loud ping from the platform. Another. She turned back around to see the platform drop from the sky like a round leaf, sliding neatly down the Devil's Throat.

Someone had shot it. Someone from the other side of the throat, back where she had been driven into the pit. Whoever it was, they were probably still over there. Eenie craned her head around, hoping to pick out where her enemy was, but all she could see was rock and scrub. No further shots had come her way, but she felt completely exposed. She scabbled up to the surface and crouched down, crawling away from the edge.

Pigs lay scattered along the edge of the clearing. Eenie approached one of them. Its side labored as it wheezed. Up close, she could see a blinking box attached to its humped back. These pigs had been under someone's control.

Still were. Two pigs stepped out of the bush on the other side of the dying animal. One of them was seriously wounded, the side of its face chewed up, as well as its chest and foreleg. The other one, the big one, didn't seem to be hit. Lights were blinking on their backs, too. Each of them wore a little metal cap with a tiny camera lens on it.

Eenie backed away. The injured one jumped over the pig's body and charged. She was surprised at its speed, and didn't move until it was almost on her. At the last second she twisted on her right heel and the pig ran right past her, straight out over the edge of the crater. She heard the pig's body thud and rocks tumbling and then nothing. Another cry came from the other side of the crater, like the one she'd heard before.

Eenie turned. It was time to leave. The finish was, actually, due southeast from her position. She walked out of the clearing. The last pig stayed where he was, his body rotating to keep her in camera view.

Eenie was off course, her link cut off yet again. She had no more support. She was being tracked, hunted. And as she moved through the featureless scrub, she noticed the wind for the first time. Saachi had shown up early. It too was stalking her, and there was no way she could outrun it.

She wasn't going to give up. Not now. Her work and that of her friends and colleagues was on the line. She had to keep moving. Her link, cut off from telemetry, could still guide her. In fact, it reported that this latest detour shaved a few more clicks off her run, making up for her much slower pace. If she hurried, if she could keep going, she could still pull this out.

Chapter 11 - Saachi

Another field of lava, this one younger, completely bare, no green in sight. Nothing but loose rock, jaggedly wicked and a swollen, bruised sky. Here Eenie was once again on the moon, the living landscape she'd emerged from, choked with biomass, a misremembered fiction.

Evening had come, and Saachi was coming with it. Hard wind, moist from the tropical storm, cooled from its flight over higher terrain, pushed at her back. On different terrain, Eenie would be happy to have the wind behind her, but not here. Walking over the sharp lava, which in '*Olelo* was called *aa*, was torturous. Eenie had to concentrate on each step, fearing she might turn an ankle, or worse, fall down outright.

Within minutes, the evening light began to fade. Everything was varying shades of grey, and would soon all be black. The moist wind turned to mist, then to drops of increasing size. She could barely see five meters in any direction before the curtain of rain dropped down over the landscape entirely.

It was no good being out in the open like this. Eenie's adrenaline had worn off a klick ago. She was teetering on wobbly pegs over the rough, loose ground, exposed, nothing between her and the increasingly fierce buffets of wind, blowing rain so hard it stung her face and arms. Or maybe the stinging was sand and little volcanic pebbles. She couldn't tell. She was so tired. She felt like if she stopped for any reason at all she would slip to the ground and stay there.

The wind pushing at her back felt alive, not hostile, exactly, just big, strong, insistent, a large, impatient animal. She'd been pushed like this before. The storm-scoured landscape faded as she tried to remember.

Alphonse. The elephant at that private zoo across the river from Hawesville. She'd first seen him on a class trip at the end of fifth grade. Paul had gone, too. Alphonse had been smaller

than other elephants, a pygmy, probably, not much taller than a grown man, though certainly far heavier.

Paul had taken a liking to Alphonse, Eenie remembered. When some other kids had started teasing the elephant, Paul had thrown rocks at them. Eenie had been surprised at his ferocity, though she'd quickly joined in, and soon the bullies had run off. The rocks she had thrown were small, and she wondered if they stung like the pebbles Saachi was pelting her with.

She would never forget the name of the zookeeper who had killed himself five years later. Mr. Micks. That day when she was eleven he'd been kind and appreciative. He let Eenie and Paul in to Alphonse's enclosure, giving them brooms with short, stiff bristles, showing them how to use them to scratch Alphonse's back like he was a dog. Eenie smiled, remembering how he loved it, how he would nudge her when she stopped, her arms leaden and aching from the weight and reach. That's what the wind felt like.

She still couldn't communicate through her link, but its map feature still worked. At the upper edge of the map was a thin line of green – the edge of a forest, though she couldn't tell how far. It had to provide some relief. Gasping, shivering from the rain almost ice cold, she told her screaming muscles to get there.

Thinking about Alphonse inevitably led to that other encounter, the only other time she'd gotten up close to him. It was a night in February, in the depths of the Midwestern winter. She and Paul were parked together in the rusty old truck that belonged to his Uncle Flash, trying to muster up the courage to start it up and leave their homes on either side of the Ohio River for good. He'd been sixteen, she was fifteen. Drenched, exhausted, thwarted, Eenie shook her head at the problems they'd thought were that significant back then – Kaolo's divorce from Eenie's mom, Paul's father suing for custody, wanting him to move far away. They didn't want to leave

each other. Eenie remembered the fierce warmth of Paul's chest, his heart hammering through his thin frame, as they held each other.

Something streaked past in the snow in front of the truck, caught for a moment in its headlights. Definitely not a deer. Then another shape – this one a porcupine, caught in the light, followed by a set of foxes, and a moose. A baboon. Eenie had no idea what was going on, and neither did Paul. Mr. Micks' zoo, a few miles from the country lane they were parked on, was the only possible answer.

They didn't find out until later what had happened. Micks, bankrupt and despondent, had opened all the cages of his private zoo before shooting himself. Eenie and Paul got out of the truck into the bitter cold, the snow muffling all of the sound except for the animals crashing through the forest around them. Eenie felt breath on her back, a nudge, and screamed before stumbling forward and turning around. It was Alphonse.

Almost all the light was gone, the lavafield more treacherous with each passing minute. The wind got worse. It felt like the storm might knock her flat at any time. Eenie stopped, and knelt down, tentatively, resting for a moment. She didn't want to sit for fear she might not get up again.

Alphonse was still, on that country road outside of Tell City, that cold winter night. He looked at Eenie, seeming calm, as if he remembered her. Paul had done something to calm him – he took a rope out of the junk in the back of the truck and laid it around Alphonse. He said he would stay inside, that he was trained to do so.

Then the hunters came.

Eenie's heart pounded as she thought about that moment, but she couldn't get back up in the ferocious wind. She had no choice but to start crawling, so she wouldn't be knocked over.

The *aa* scraped her fingers, jabbed at the meat of her palms, dug into her knees. She kept her face down, the rain streaming down her back to her neck, her cheeks.

Her right hand touched something smooth. It was a rock, rounded and polished, completely out of place in the middle of the *aa* field. Next to it was another smooth rock, then another, and another. They were not the same stone as the cooled lava, larger, lighter in color. She could see them in the vanishing light, a pale line stretching out in front of her, a path of natural pavers, taken from a stream or shoal, laid out who knows how long ago. The trail headed more or less in the direction she was going.

The town had heard, by telephone and CB, that Micks' animals were out. The sheriff had authorized a hunting party, and these rural Indianans would never get another chance to bag game like this again. The woods rang out with rifleshot and baying hounds.

As Eenie and Paul worked out what to do, headlights came up the dirt road from the direction of town. A truck came around the bend and stopped in view of Alphonse standing in headlights of Paul's truck. Flashlight beams moved toward Eenie, Paul and Alphonse. Eenie stepped in front of the elephant, and Paul stepped in front of her, a rifle from the rack in the rear window of Flash's truck tight in his hands.

Somehow, Paul and Eenie held the three hunters off until Paul's grandpa and uncle Flash drove up in one of Flash's beaters. They kept the hunters back, allowing Paul and Eenie to walk Alphonse back to Grandpa's farm. Paul led the elephant, speaking softly to him, while Eenie rode on his back. As the twin pools of headlights diminished behind them, she became sure that other men with guns lurked off either side of the road, waiting for the perfect shot. She draped herself over the top of the elephant's head, shielding him as best she could. Alphonse, for his part, was silent except for the snow creaking under his feet.

The Indiana winter had been cold and quiet. Saachi felt just as cold, but deafening, pitch black. Eenie didn't know she'd arrived at the edge of the forest until the fingers of her right hand found something vertical, rough, and pliable. A tree. She couldn't believe it at first. She wrapped her arms around the trunk, used it to pull herself upright again. She rested for a minute against the tree, on the lee side, out of the wind for the first time in what seemed like hours. Then she made her way further into the thicket, arms outstretched in the dark.

Once she passed the frontier of the trees, the bite of the storm lessened as it beat itself against the trees and underbrush. The link showed this patch of rainforest as not very large, surrounded on all sides by naked lava rock. It was a *kipuka*, a little protected bit of forest that the lava had flowed around, leaving this swatch of mature jungle intact. It was too dark for Eenie to see what was happening further in, but anything was better than being out on the moonscape.

The ground rose a bit more, then it started down. Eenie kept going. As she moved lower down the declivity, the sound of the storm lessened. Torrents of water streamed past her feet, washing over her calves. She didn't know what was below her – a swamp, a flash-flooded stream, a hole to the middle of the fucking world.

She was completely done in. She slipped back down to the ground, hunks of moss sliding out from under her feet. All around her were low plants with wide, broad, hydrophobic leaves. She crawled up underneath the brush until she could feel the rain hitting her face lessen. She had crawled into a little groove, a valley between two rocks higher than her head. It had not turned into a stream, and it might protect her if a tree came down. She had just enough energy to wrench the holua off her back and brace it between two rocks above her head and torso.

It was the best she could do. As Saachi raged around her, as Pele – she meant Stephens – either kept moving or hunkered down herself, as she maybe lost the race, Eenie faded out. Her

last thought was of Alphonse in Paul's grandfather's barn, warm, protected. He'd been one of the only survivors of Tell City's big hunt. Shredded leaves and small twigs sprinkled down on her shelter as the storm shook her forest refuge, covering it in a thickening blanket.

Saachi blew and blew. As with all things, her roar eventually dulled into quiet. The balance, always delicate, was restored.

Chapter 12 - in the *kipuka*

Sounds woke her, but not storm sounds. The sky was quiet. Saachi had passed, maybe, or maybe the *kipuka* was now in her eye. The only indication of the tropical storm was the rilling and dripping of a thousand different streams and rivulets as the *kipuka* drained into its central hollow. Eenie opened her eyes to see the bottom of the *holua*, still overhead, and some type of light trickling around its frame and blades.

She pushed herself up on her elbows. The rustling coming from outside stopped.

“Eenie? You up?”

“Kal!” Eenie clawed her way out from between the rocks. She tried to stand, wobbled, pitched forward. Kal took a step and caught her.

“I’ve got you,” Kal murmured in her ear. “I got you, Een.”

Eenie let out a long shuddery breath. “Took you long enough.”

The race officials had halted the race during the storm, Kal said. They wouldn’t let anything in, though. The racers were on their own.

“Think I gave a shit about that order,” Kal puffed her lips. “I was on my way down the minute I saw those lavaheads throwing coconuts in Volcano. Took a while to work through the perimeter. I mean, I could have walked right in, probably. Rogers didn’t even try to talk me out of it. Just said no detection.” Kal smirked. She bent over to rummage through her pack. She offered Eenie a pouch of water with electrolytes, went back in for food.

“No way were they keeping me out.”

Eenie took a long drink from the pouch. “Did Stephens stay put during the storm?”

“Supposedly,” Kal said. She shrugged and looked up from her pack. “I don’t really know, though. I’ve been dark the past four hours or so. You were still in the lead, last time I checked.

“Here, eat this.”

“Thanks.”

Kal pulled out a zippered pouch. Meds, bandages, a little IV pouch. “Let’s see how you’re doing.” She stuck a biometric strip to Eenie’s neck, then peered at it. She poked and prodded, checked her equipment, and generally irritated Eenie.

“Maybe this will keep you still.” Kal handed over a vid screen.

Eenie studied it as Kal started poking at her. No picture, but she could hear something.

“Hello?”

“Eenie,” a voice said. It was thin, garbled, flat. She recognized it anyway.

“Paul?”

“Eenie. Eenie, oh, you’re there,” Paul said. “Are you okay?”

Kal had bandaged her arm, and was inspecting the cut on her face.

“I’m pretty fucking wrecked, Paul.”

“God damn it. Damn it. I just... I just want to be there. How can I get there? The embassy or something. I’m going down there as soon as we are done talking.”

“It’s okay, Paul,” Eenie said. She gasped as Kal hit a sore spot. “This isn’t the first scrape we’ve gotten into.”

“I know.”

“Remember, Paul?”

“Yes. The hunt.”

“Yes. It’s like that.” Paul was fading back, Eenie could hear it in his voice. Back to the thing they alone shared. They’d saved Alphonse that night. He’d practically been the sole survivor.

“Remember how long it was, Paul? That walk back to the farm?”

“Two miles?”

“Yes. That’s all I’ve got left.”

“Piece of cake,” Paul said.

Eenie laughed. “Only thing…”

“What?”

“I’m the elephant.”

No broken bones, Kal had said, just sprains and twists. She strapped some compresses to Eenie’s leg and wrist, taped her waist, told her to go back in her little hut and rest a bit. Kal was going to go check the perimeter, then she’d come back and lead Eenie out. Eenie complied, and Kal piled more foliage on top of the holua. Eenie lay still as the light turned green and softened. The sound of Kal smoothing away any sign of habitation lulled her back to sleep.

Sounds again, not the same as before. Some sort of sniffing.

Eenie had dropped out again. She hadn’t even known when, maybe as soon as she crawled back in and collapsed. It had been quiet for some time, some part of her knew, that instinctual awareness that became necessary when you slept outdoors, exposed. It was darker out. Clouds building again, maybe. She brought her arm up to tap her link. Just past two in the morning.

The snuffling sound came again, somewhere down around her feet. It sounded like some kind of animal. Eenie had crawled back in her little shelter, which Kal had re-covered with leaves and other debris blown down by the storm. She couldn't see out. She slowly brought her still sore legs up into a ball under her holua canopy. The snuffling stopped as the creature listened to her move under her blanket of stormfall. When Eenie stopped moving, it was silent. The sound of the water dripping and falling through the leaves came back in.

A squeal and a crash and something pushed into Eenie's little space. Another pig, maybe storm-dazed, maybe territorial, but this was not the first time Eenie had been attacked. Its snout and then its head pushed through brush Kal had piled. It tossed its head back and forth to get free from the leaves and twigs. It came again.

Eenie pushed herself back into the space, the rocks on either side pinching her shoulders. She reached up and pulled the holua down in front of her, the makeshift thatch roof coming down with it. She felt the pig slam into the holua at full speed, driving it back towards her.

The sled wedged between the two rocks right in front of Eenie. Her legs kept moving, pushing her back. She pistoned herself further back, twisting her shoulders so she could slide deeper. The rocks pinched, hanging her up, but then her shoulders slipped through. The holua was failing, twisting, its long skids bending as the boar continued to push. It was heavy, strong, determined. It would be through Eenie's makeshift gate any second.

Eenie frantically twisted her body, pulling her hips through the gap, her legs following. All she had to do was to pull her head through and she'd be free.

Her neck and her ears slid through, right up to her helmet. The rim clunked against the ridge of stone and that was it. Eenie was stuck.

The hog had battered the sled out of the way. Eenie could hear its snuffling inches away from her. Then its jaws were on the headdress. It clamped down and shook like a dog, digging its feet in and pulling. Eenie could feel the heat of its breath on her exposed neck. She clawed at the helmet's neck strap. She didn't know she was screaming.

The pig's pulling, the wet was making it hard to get the thing undone. The hog was jerking her, twisting. Eenie had to keep moving her body around to keep her head on straight. All of a sudden the strap popped loose, and Eenie's head followed her body through the breach. She ended up on her ass. She looked back through the crevice.

The hog had the helmet in its teeth. Eenie could hear its jaws crack through it. Too soon, it figured out what had happened, that Eenie had gotten away. It let out a squeal of rage. Eenie could hear, then she saw the pig charge, running straight towards the gap between the rocks. She tried to get her feet under her so she could dodge, climb, just get out of the pig's way, but the slick rock and mud wouldn't stay under her feet. When would this be over, she thought. I'll give up, I swear, just leave me alone.

The pig's forward movement slowed, then it stopped altogether. It, too, had gotten stuck. Its front half up to its forelegs was on Eenie's side of the narrow passage. She could see the two legs paw at the mossy, slimy rock. The rest of the animal's bulk was lost behind the leaning shoulders of stone.

Dumbfounded, Eenie stared at the trapped boar for a minute. She looked over either shoulder to see if another pig or threat was around. The rest of the kipuka was silent, motionless, the pig's struggles the only disturbance.

Eenie struggled to her feet, slipping against the slimy rocks and roots, her eyes only on the pig. It looked familiar. She stepped closer. Was it... could it be the same one? From back at the Devil's Throat?

She was sure it was the same. She could scarcely believe it. There was that little metal hat, the device on its back. Had it tracked her here? In the middle of a storm? Whatever its motivation was, she knew it meant her harm. The pig wasn't still – it was already trying to tug itself loose. She couldn't leave it to come after her again.

She picked up a big rock, climbed up onto the split boulder, one leg on either side. The massive boar was just underneath her. She raised the rock, ready to bring it down on the animal's head, but hesitated. Maybe she could just destroy the electronics, let it be a pig again. She brought the rock down, not on its head, but on the metal box on the pig's back. It squealed at the blow, then went silent, still. It jerked every time Eenie hit the box. Another hit. The lid of the box popped off, exposing a mass of wires and chips. Eenie reached in and pulled. Techno stuff stretched and snapped. All the lights went off. The boar slumped. Water trickled. Dripped. The boar wheezed, but remained still.

It was over. Eenie sank to a sitting position. She let the mass of wires drop from her hand. She let herself breathe.

After a few minutes, she looked up. Where was Kal? Her hand went for her link but it wasn't there. It must have been stripped off her ear during the struggle. Her heart started hammering. She had no way to know what was going on out there, in the world beyond this little hummock, if she still had time, if she could still finish this thing. If the race was still on or not. So much had happened that was patent interference. Haru had told her, and Kal had confirmed, that she should think of the race as being on, no matter what.

Enough prevarication, then. Eenie had to keep going. She was almost there, she knew, maybe two clicks at most. She scooted to the edge of the rock she was sitting on, then slid down noisily to the trampled ground behind the pig. She turned to look at the pig's rear. It didn't move. She reached down and picked up the holua. It was bent all to hell. It would never make another run. The thought of trying to ride the mangled mass of wood and steel down a chute tickled her. She felt a laugh bubbling up in her throat and clamped down, knowing if she started, she wouldn't stop until she was flat on the ground.

She looked up, trying to orient herself. It looked like the storm had indeed passed. The sky was clear, light from the moon picking its way through the kipuka's denuded canopy, illuminating the shallow, soupy bowl at its bottom. If she remembered correctly, she had been travelling more or less southeast. That way was across the bowl, down its decline and up the other side and out. From there the sea arch should be in full view. Sooner or later she'd run into the old tourist trail that led right up to the sea cliff and then it would be easy.

Another hour, maybe, and she'd be done. The sleep had done her good. Her muscles and joints were sore, her neck wrenched by the hog's attack. She was still riding the adrenaline, though. She started to pick her way down through the slippery rocks towards the floor of the pocket jungle, dragging the beat to hell holua along with her.

Soon she was down in the kipuka's bowl. All of the rainwater collected here, seeping down through the stones and moss to a swampy flat that then drained to a small creek running more or less due south. Eenie would have to cross the bog, then the stream, before begin climbing back up out of the other side.

She hadn't seen Kal. She called out for her as she made her way down the slope. Kal didn't answer.

She was at the bottom of the bowl. It was filled with water black with tannin. There was no way to tell how deep the swampy area was. Eenie didn't want to step down into it without knowing for sure. She perched on a rock not far from the surface of the bog, then lowered her holua down into the opaque soup. It went down for half a meter and thunked against something solid, a rock or maybe a tree trunk. Not too deep. Ten yards of this and she'd be at the stream, which was clear, and then the other bank, and then she'd be out. No problem.

She used the holua as a brace as she lowered herself into the dark, algae crusted water. It was cool enough to make her shiver. Her feet found the hard thing submerged in the muck, probably a trunk or log. Good. She could stay on this for now, maybe slide all the way over to the streambed. She moved the holua ahead, scooted, moved it again, and took another step. Even off the log the swamp wasn't too deep, maybe waist high.

Eenie was picking away at her trail, so absorbed she didn't see Kamapua's step out of the green on the other side of the stream and start to walk towards her. His eyes locked on her form, he ignored the terrain.

He stepped into the stream, splashing noisily, and Eenie looked up. She froze. He stopped for a moment, maybe ten meters away. He looked awful, worse than before. His tee shirt was nothing more than rags, shredded by foliage or the storm, his face and arms streaked with cuts, smeared mud, blood, his maybe, or maybe that of his pigs. His belly was marked with carnage, too. His straggly hair looked patchy, as if it had caught on brambles and instead of untangling it he had just tossed his head and kept going, letting it rip right out of his skull.

Eenie couldn't believe it. Was she hallucinating? How could he be here? Had he simply materialized out of the slime of this primordial place? Or had he tracked her, through the unmarked brush, the storm? The moonlight picked out the mud stuck to his face like baby food. His face twisted, screwed up, he took a step forward. She had no idea how he could see her through the dirt and glops of hair. But he was coming, right through the stream, up the bank, then down into the swamp and towards her, while she stood transfixed.

Eenie screamed at him, furious, panicking. Not this. Not now. She scrambled backwards, her holua she suddenly couldn't let go of, a heavy walker. She moved back, slipped on the submerged log. She pulled herself up. Kamapua'a kept coming, a projectile of rage. She backed onto the bank near where she'd started. She tried to push herself up higher, trying to gain some height. She fell back on her elbows, drawing the holua up to straddle her midsection. The back of its two rails planted themselves in the thick moss.

The warthog reached the log, stumbled, fell forward towards her, his body pushing a wave of dark water towards her. Always towards her. His hand reached out as he fell, almost catching her foot. Eenie pulled it back at the last moment. She pushed down against the holua to twist up higher on the bank.

Kamapua'a got to his knees, then lunged for Eenie again. She twisted, and his hand came down into the moss just to the right of her waist. His other hand came up, fell just on the side of her other shoulder. He pulled himself up. He was over her. Another rush of dark water came as his knee slid between her legs. She kicked at his massive thigh. His face widened in a horrible smile. He had her, and he knew it.

"Poliahu," he said, the words spitting out towards Eenie's face. She jerked back, twisting to avoid his spittle, only partially succeeding.

“Saw your trick. Bad, evil trick. You trick my wife? No one cheats Pele! The fire has you now. Just as it has us all.

“Told Pele I would help her. She said to go away.” The warthog pounded the mud. “Way she looked at me.... She hated me. Told me to leave. Sent men to bring me down.”

“Her fire didn’t take Kamapua’a. Came down the mountain, to the lowland. The jungle.” His gaze fixed Eenie again.

“Knew you’d come through my land. The jungle. The swamp. My kingdom. Not much like your cold tower, eh, Poliahu?” He laughed as Eenie pummeled his chest, his shoulders.

“She will love me now. Love me again.

“It’s over, Poliahu. Jungle magic wins. Lava magic wins.”

He was completely over her now, both his legs between hers, his hands coming down for her neck. He was leaning over the holua, his weight crushing into her midsection. It was just like back in the Poi Poi. She couldn’t breathe. It wouldn’t matter even if those hands did get to her neck, his weight alone would be enough to smother her.

The holua. The bent rail. Maybe she had one more trick.

Eenie sat up, putting her face next to Kamapua’a, surprising him.

“No, I win, you stupid shit!”

Eenie locked her legs around the warthog’s knees. She reached up and clamped onto his back. Then she pulled.

Kamapua’a grunted as his whole weight pressed down on the holua. Eenie felt something snap, then the big man sank lower. He howled in her ear. He tried to find purchase, something to push himself off of her, but his fists sank deep into the mud. Eenie’s midsection was on fire. She kept pulling.

The man started sobbing. His thrashing grew weaker. He pulled one hand free from the muck. He tried for her face again, her neck, but his paw flopped limply, too weak to grasp.

Eenie's stomach and torso grew warm as the man's insides rained down on her.

A few seconds more and the warthog was still.

Chapter 13 - fallen arch

One last kilometer. The sea cliff. Everything hurts. Breathing. Her throat on fire. She kept going.

She hadn't been able to move the man's carcass off of her, not at first, not until blind panic helped her find the strength to push him to the side. It was more agonizing minutes until she pried herself free. She had no idea how she got back across the swamp and up the other side. The first thing she remembered was standing on the top of the bank, panting, arms across her midsection. Then, just one thought. Kal.

Kamapua'a's path wasn't hard to follow. He'd ripped his way through the underbrush in a more or less straight line. A dozen steps down the Kamapua'a-sized trail and Eenie was at the edge of the island forest. Beyond was the lavascape again, open air. She could breathe, and see. Out past the end of the lava field, some distance away, a dark seam, smooth, stretching all the way to the horizon. The sea. Eenie was looking at the ocean for the first time since she went into the forest north of Volcano. Now nothing stood between her and the end, or so she hoped.

Just at the edge of the kipuka, half-concealed by underbrush, Eenie found Kal, bound, unconscious. She collapsed next to her, her side on fire. She sliced Kal free of the strange elastic bands that held her, using Kal's own knife. Once cut through, they snapped into a tight little ball, like a torn ligament. Somehow they both got back on their feet and back out on the lava field, where they stumbled and swayed, and held each other up.

Now they were almost there.

Another band of clouds blackened the stars, though to the east the dawn's first gloaming seemed to hover just beyond the horizon. The sky between the horizon and the clouds was a blue not quite black, a Skibotn sky, back when she'd post-doc'ed at that little Norwegian observatory

above the Arctic Circle. Some days the sky never got to the blue of midday or even morning, always that navy blue-black of early morning. Eenie focused on that sky, beyond the end of this island's earth, and maybe she didn't have to be in this body anymore, maybe she would just slide as in a dream to the finish line of this perverse orchestration.

She kept gazing out like that for some little while, then let her eyes flutter back down. The end of her long walk was before her. She had maybe a hundred meters left to go. There were lights at the end, a stage, it looked like. Someone was standing there, in the light, the ocean behind them, while Eenie was left trodding the earth, gasping for air.

Air. Earth. Water. Fire. Alone, none of the elements worked out well. Earth without water – that was the moon, or Mars, or the extrasolars that Eenie had looked at... two days ago? Sliding through space, baked for eons by errant radiation, like bone in the sun.

Fire without ice – that was Venus, Mercury, the Sun. That was the greenhouse.

Ice without warmth: Pluto, or the yet unobserved planet nine, orbiting way out in the dark. An observatory, cold, alone.

Only here did all of the elements coexist. Here, on this island, on one planet of eight or nine. Fire. Water. Earth. Air. From these came spirit. Eenie's side was on fire. She gasped for air. Sweat and swamp water streamed down her face, her dirt and blood streaked body, to the earth that slid underneath her as she moved towards the lit-up stage. The earth itself, feeling so solid, thrummed now under her feet. The ocean, storm-whipped waves, smashing the sea cliff, so close now, vibrating up through her body, waves eroding earth, the earth itself a thin crust riddled with pockets of air, and water, and fire, the core of that earth hotter than the sun. Fire underneath. Only ice above.

Fifty meters now. Eenie could see a pair of platforms, big, beefy ones orbiting the lone figure on the stage, a man, in some ceremonial robes. The stands around the stage were empty. No music was playing. The area outside the cordoned-off track, which Eenie had just entered, was devoid of onlookers cheering for her to finish.

She stopped, standing uncertainly, her body wavery from exhaustion and pain. She'd lost. She sighed, feeling... what? Relief? Yes. It washed over her.

She was done. Never have to run this ridiculous race again. She would leave Hawaii. Kal and her Marines would evac her to the consulate, and she'd be on a plane back home. Where, though? To America? Kentucky? Paul had said her house, her father's house, was gone.

Paul. Yes, find Paul. Find a place, didn't matter where, a quiet place. Watch the world burn itself out.

She couldn't stop a sob from rising up her throat. She'd never see the stars again. Not like here. The cosmos would close itself, to her, for sure, and probably to the world. What would she be, without the stars? The ice was already gone. Years ago gone. No sleds - the last one, yesterday morning. No stars, now, too.

The man stepped off the dais, walked towards her. She blinked her eyes, trying to focus. The two big security platforms flanked him as he came closer. One of them orbited behind him, shielding Eenie's eyes from the glaring lights.

Haru.

He walked right up to her, his face concerned, but composed.

"Dr. Kiernan," he said, his speech formal. Eenie didn't reply. This isn't how this ends.

Haru repeated her name. He reached his hand out, hesitated, then moved it towards her shoulder. Eenie jerked it back, the violence of her reaction causing her to stumble back a step or two. Kal grabbed her arm to steady her, shook it, called her name.

“Janice,” Haru said, his hand still outstretched. “Eenie. Come. Let’s get you to the end.” He stepped forward, reaching for her left arm again. Eenie let him touch her this time. He pulled her away from her sister, motioning behind him for an aid to come tend to Kal. Gently, he coaxed Eenie into a broken step. She stumbled again, her body crying out in protest, but stayed upright. Somehow, with Haru’s help, she made it down the chute at the end of the race to the dais and up the few steps to the top.

Last year, the finish line had been lively. The dais overlooked the Holei Sea Arch. Not long after, the arch had fallen into the voracious, steadily rising sea. The place where it had connected to the island still looked raw, as did the top of the nub of column that jutted up out of the ocean. Haru turned to stand beside her and followed her gaze.

“I’m glad it’s gone,” he said. “That arch was just another looksee for the tourists to mindlessly gawk over and take their endless pictures. It used to be sacred, you know? Then the tide of tourists came. Mericans, Japanese. Just another tram stop. Their slack-jawed, oblivious attention. Their cameras, stealing this place’s soul.” Haru raised his arms, revealing his robes, glittering. They looked expensive.

“Great Hawaiian chiefs would come here to make sacrifices. To Tangaroa, the dark tentacled god of magic. To the shark god, Kamohoalii, to Namaka the sea goddess.” He glanced over at Eenie. “Maybe even to Humuhumu-Nukunuku-Apua’a, may his gentle protection and love bring us blessings.”

“I’m glad it’s gone,” he repeated. “If it hadn’t fallen in itself, we should have pushed it into the sea. We can cleanse, now. Forget the grubby fingers of the foreign tourists. Get back to what we were, what we are meant to be.”

Haru turned fully towards Eenie. He had this look on his face. He was both relaxed and excited. Eenie didn’t know what, but something had happened. She didn’t know what to say after his speech, which sounded like it wasn’t really for her, anyway. Eenie just stood there, favoring her injured side.

“We are Hawaii, Eenie. All of us. You. Especially you, amanuensis of Poliahu. You are the best of us.” Haru bowed sharply at the waist.

“You, Poliahu, have won yet again. Age old myth is now true once more. Hawaii is whole. No one will take our identity again. Our land. Our waters.”

“You did it, Eenie.”

“Did what,” Eenie managed to squeak out.

Haru gestured towards the platforms, which swiveled their camera edges in concert towards the sky.

“Didn’t you hear me? You won. We won. The fundamentalists capitulated. Ke Kahuna. He proclaimed all Hawaiians – *maka’ainana* – as kanaka. All the people of the land as people.”

“You did this. You fulfilled the prophesy. You, a *haole* Merican. Goddess. Snow queen. You have no idea how important all this was.”

“I... I...” Eenie sank to her knees, Haru grabbing for her arms as she slid down. “I can’t. Haru. Not anymore. I will never go through this again. The, there were pigs,” tears were welling up in her eyes. “Screaming. The hate. I will never do this again.”

“Eenie, you misunderstand. The races are over. You made it. We are all safe now – me, you, anyone not *maoli*... Yes, there will be challenges. Yes, we will have to remind them. But the races are over. Next year, I don’t know.” Haru laughed. “We’ll do a parade. We’ll all just march down to the sea. Poliahu and Pele side by side, at the head of the pilgrimage. You can just sit there and wave.”

Eenie just shook her head, her brow furrowed. Even that hurt. “I won’t race again.”

“No, Een. You won’t have to. All you have to know now is this. The observatory is secure. Not just today, but for years to come.”

The storm gone, the sun finally came up, brightening the sky. Eenie was tended to, and she was hauled back up on the stage for the official announcement. She and Haru on tall bar chairs like this was some weird old good morning talk show.

“Ready?” Haru said. He waved, and a flock of women came out from behind the stage. They gently sponged her face and arms, pulled the twigs and muck from her hair, replaced her lost headdress with one identical, but lighter, without the protective helmet underneath. They didn’t worry about her shredded clothes, instead shrouding her with a blazingly white poncho, glittering with white and pale blue dazzlers.

“I killed him, Haru.”

Haru looked over at her, his right index finger over his lip. He gave the slightest nod. He knew. Haru had known what she was going through. Her face creased again, and she took a breath, ready to protest. Haru cut her off.

“There wasn’t anything I could do. I was just about in a cell. The reds, those bastards, ready to push us all off the island, everyone not *kanaka maoli*. Everyone not on the rolls. They

were even talking blood quantum, if you can believe that horseshit. I couldn't say anything. I couldn't do anything. Just... bear witness." He reached out to touch her hand, but seeing the look on her face pulled his hand back. "I was able to do one thing."

He glanced up, and Eenie looked up too. A platform, a big one, hovered at the edge of the crowd. He – or one of his cohort – had piloted the military drone that had mowed down the robot pigs.

A million things running through her head. Haru saving her. Letting her fight. Pushing her. Coming to her four years ago with this race in the first place. Haru pushing back the mob from the fence of the observatory alongside her the year before that. Haru in her room on Kea, and, briefly, she in his on Oahu, then, after, Haru aiding her in a million different ways, though not without cost. She couldn't reckon it. It was too much.

"Are you ready for the 'cast? We'll make it short." Eenie still said nothing.

Haru signaled again, and the lights around the stage blazed and the cloud of camera drones descended out of the sky.

Eenie said nothing during the short broadcast. She handed a new holua over to Ka'mi, who had appeared alongside the washer-women and the rest of the snow queens, who stood behind her. Ka'mi handed it to Haru. Stephens, looking not at all as done in as Eenie, stood on the other side of Haru and glared. Eenie gazed at her coolly, wondering how much she knew.

Haru turned to Stephens and instructed her to hand over her holua, and to genuflect towards Eenie and say the words set down in the myth.

Afterwards Haru rose, clasping Eenie's right hand and Stephens' left, raising them. He said something about the power of lava magic and snow magic both, how both were important in

the future of Hawaii and the world, about Hawaii being a place of balance. I was just thinking that, Eenie thought to herself.

There was Stephens. Stewing. Fuming. Maybe kanaka, Eenie didn't know, maybe a poor castaway like herself. Maybe it wouldn't matter anymore. Hopefully.

The deluged masses, of which Eenie had been one, and Kal. And Paul, wherever he was, tossed around the Pacific, searching for a home.

They had to find a way to live together. Fire and water.

The ice cliffs of Antarctica continued to calve, Haru was saying. Let the sea rise. Hawaii and her people would stand strong. All of us.

After the embraces of her sister goddesses - both astronomers, and the one goddess from the other side of the island - after the lights were turned off and the camera drones slid back beyond a proscribed perimeter, Eenie walked with Haru down to the cliff edge. Haru seemed different. Content.

“What's with you, Haru?”

“I told you already. We won.”

“You're not talking about the race.”

Haru looked out at the ocean beyond the ruined arch. “The temple agreed with my –our position. We are all in this together.” He looked over at Eenie.

“What is magic?”

“Oh, don't start this with me, Haru,” Eenie said. She saw he was serious, and relented. “I don't know.”

“Yes you do. You, more than almost anyone, are magic.”

“No, I’m not. Come on”

“What are you, then?”

“Haru, I am way too tired for this. Those pills they gave me are starting to wear off.”

“You are magic, Janice. Magic is illusion. But not entirely. Something changes.

Something is moved from A to B, but no one sees how it happens or knows exactly how.

“Except those who do. Like you. You know, Eenie. You can make things happen that no one else can. You are a scientist, yes, but also a priestess, much as I know you hate to be. You straddle the line. The way you are now is the way forward for Hawaii. Look.”

Haru pointed towards the ocean, still angry and dark from the storm. Something slipped up out of the waves, something big. It looked like some kind of animal painted in vivid Technicolor, its teeth bared, one baleful eye looking up at them. It was bigger than any sea creature she’d ever seen. After a second Eenie could see what it was. A submarine. A big one.

“That is Hawaii now. A parting gift, let’s say, from the Mericans. His sister is out along the south. Transalaska has some, too. Undetectable by sonar, radar, or anything.”

Eenie frowned. “Why the war paint? Won’t it be underwater? Unseen?”

“I said undetectable, not unseen. It will be seen, when we want it to be, by rafts of refugees, by pirates. Stories will be whispered, about Kamohoalii and the vanished gunboat, about Ukupanipo and someone’s sister’s family-in-law pulled out of the sea, and every time it is told Hawaii will be safer, stronger. Your story will be told, over and over, and you and the work you do up on your mountain will be respected and feared. Not understood, but known. That is magic.”

“It sounds like you like this, Haru,” Eenie said.

“Me? I am a stoic. We live in the world we live in. We make it work.” He waved his right hand to the side. A large platform rose up over the edge of the cliff to settle a few inches above the ground. Haru stepped on.

“Where are you going?”

“Right now? Out to do one of the things I just mentioned. I need to see how the system works, make sure the right stories are told. After that, on to Oahu.” Eenie realized that Haru’s costume wasn’t just a costume. The jewels and ornaments were real.

“You made out well, Haru? You’re what? King or something? Who are you now?”

“Your servant, goddess.” He bowed, and the platform moved off the edge of the cliff, taking Haru down towards the snarling nether creature, its eye fixed on Eenie. Soon Haru was just a speck. A dark patch opened on the ridge of the submarine’s back and Haru’s speck slipped into it. The hatch vanished as if it had never been. A moment later and the decorated skin shivered, the colorful tribal war paint morphing into the coloration of the sea, deepening to dark blue as the waves crested, lightening to a color close to aqua as a trough slid over. It didn’t sink below the waves, to Eenie. One second it was there, and the next it was gone.

Chapter 14 - the consort

This too is the lore of Poliahu, goddess in this late age.

Like everyone, Kehaulani - Lani to her friends, two brothers, and parents - was older now than she was. Like everyone, she now understood. This world could be lived in. Peace was possible, though it required both fences and gates. Farmers and warriors. The heat of passion and the cool of resolve. Tempering was not the act of being lukewarm or indifferent. It was the hot meeting the cold.

No one in no place was all one thing or the other, Lani told herself. Evil felt pain and sorrow, and the good could render bad judgement.

Lani herself was halved, her mother *kanaka*, her father one of the Marshallers, his country lost to the god of the sea, named Kanaloa by Hawaii, though her father called him Tangaloa. Most everyone was like her. Poliahu was, too, whom Lani took as her personal *kahu*.

Poliahu never talked about where she came from. There were vids of her younger years, her Olympic years, and of course the races. Lani kept a vid of Poliahu on her link as her avatar. One where she was walking in front of some jeering lavaheads. Poliahu acted as if they didn't even exist. More recent footage of the annual processions as she and Pele and the other goddesses paraded down to the sea, the white and the red together. At the end of their journey, Pele and Poliahu both walked down the slim strand to the sea. The vid would geomark where their feet touched the ocean. Lani could pull up all five of the markers, each new one farther in, as each year the sea advanced and did not shy back. The sea these days was all one thing and not the other.

She also found other vids, of the goddess at a scientific conference. The goddess shooting down a tube of ice. She found one of the goddess as a child, a few years older than Lani, tearful,

throwing herself over the head of an elephant, a large animal that Lani had never seen in real life, and probably never would, even if any still existed.

The sea kept climbing, but the mountain was high. Poliahu would never drown. She would never let Lani drown, or her family, her father and mother, her two brothers. Pele, too, worked to keep the grumbling old sea god back. She sang the lava to the surface, persuaded it to march down her flanks to battle the sea. Lava and snow magic both working to protect the island.

Her father's island nation, the Marshalls, was gone. So were others. Cities gone, countries, so many Lani didn't know their names.

Lani remembered hating Pele and her red-heads, always screaming about lava magic. They had tested Poliahu to her limits. But somehow Poliahu had forgiven Pele and her cohort. That forgiveness had cooled Pele's anger, turning it into something good.

Her father had a job, now, because of Pele; her mother too. Pele had made a new island west of Ni'ihau, just last year. Her father was busy stabilizing the soft tuff of the new land so that it would not slide back under the waves. Her mother worked there, too, infusing the rich cinder *'aina* with a new, authentic biome. No rats, mother says, no pigs.

Her parents were on the new land for long stretches of time. Lani found her own balance between school and the world outside. The island had much to show her – the plants, the stone, the animals. The water, not just all around but all over the island. One stream could be warm, even steaming, running down from Loa or Kilauea. Another was ice cold, racing from Kea. She found the secret places where the Mericans had abandoned the things they couldn't take and didn't want the kanaka to have, odd things with no sense to them.

Lani prayed to Pele, dutifully, gratefully, as her parents insisted, but her heart belonged to Poliahu. When she was tired of school, she would leave, go up Kea's slope. She would bring an

infrared and a blanket and climb high, past the tree line. She would lay on Kea's bare flank and wait for night. The island would grow dark and disappear entirely, if she was laying in the right spot, and the sky and the sea would become one thing, dark and shimmery, filled with stars. Kea wasn't a mountain then, rooted deep in the earth. It was just another rock floating in the cosmos that swirled and orbited around it. Here, above the trees but below Poliahu's summit, she felt like she knew how the goddess saw the world.

Once the goddess saw her there and came floating down to her. She asked if Lani, lying below her, was hurt. Lani hadn't known what to say. Her mother had told her never to talk to the goddess, especially when she was in human form as she was.

But Poliahu had addressed Lani directly. So Lani said no. She said she was waiting for the stars to come out and the world to go away. Not to just see them but to feel herself among them.

The goddess had turned towards the sky then, and Lani knew that Poliahu was not looking up, but out. She told the girl she liked her spot, and she could go there anytime, and she should come up to the summit sometime so she can be closer to the stars.

Lani had said she would. Later, she would. She would see the scopes, the instruments of the goddesses, even though her father still grumbled about desecration and sacred ground. How could something that belonged to a goddess be profane? She would apply to be one of Poliahu's assistants, when she was older.

Tonight, though, she was on her way to her special spot. It was going to be a clear night, a night to get out of the stickiness and the noise.

She was most of the way up the stairs when she heard the noise of people coming down. It was dark already in the forest, the steps treacherous this high. Tonight, cold was running down the mountain so fast the slick carved stairs turned to frost – Poliahu’s lace.

The noises grew louder and a light came down, growing brighter. Of a sudden shy, Lani stepped off the stair and around an old banyan. Thinking how best to remain unseen, she clambered up the tree to one of its long horizontal branches.

A platform hovered down to the landing Lani had stepped off. It turned and moved around the banyan, and people followed. First two guards from the summit, the dark one she remembered from before, when the scopes had still been owned by the Mericans. Then came the old priest, then Poliahu herself, then a man she didn’t know. Poliahu was not in her ceremonial garb, though this group passing below her felt like a procession. A dozen or so others passed by, including the other snow goddesses and some of the ‘stronomers. They were all moving down a path Lani had not noticed before, little more than a pig trail. The platform orbited the retinue as it moved off into the jungle and the green hid the light from view.

Lani slipped to the ground and followed. She concentrated on being quiet, so it took her some time to arrive at the place where the group stopped. The path led to a narrow canyon, deeply nestled between two steep, folded cliffs, a crack in the side of Kea. In the cut the green took over everything, the air humid and still. At the top of the cliffs, if she could possibly climb up that far, she would be on the naked, ancient a’ a landscape of the long dormant volcano.

The place felt sacred, though Lani was not familiar with its provenance.

At the back of the canyon stood the priest on a little bit of prepared ground, with Poliahu and the strange man. The man looked Merican. Wasn’t even tan. He looked uncomfortable. But he looked at Poliahu with a gaze that made Lani tingle sympathetically, and Poliahu looked at

him straight back. They looked at each other as the priest spoke. They murmured something to each other. Then they kissed.

Lani knew she was witnessing the marriage of Poliahu to a man. Not *kupua*, or even a warrior. Certainly not kanaka. Not even a shaman. Just a man, mortal, completely uninteresting. Wait- was he someone in the pantheon, but incognito? Lani didn't recognize him.

The short ceremony ended, and the gathered cheered. The man and Poliahu stepped onto the large platform, which then hovered up out of the cut as the sister goddesses threw leis. Poliahu caught one – a totem of luck – and the group cheered. Then the two were gone. The party started back up the track. Lani hid quickly, and the people passed talking excitedly and with adoration.

All except the old priest, who stopped and turned towards the darkness. He did not tell Lani to forget what she saw, or to keep silent, or to remember the pact of incognito. He said, speaking out into the darkness that surrounded Lani, to take heart. And then he walked away.

Ever since that night, Lani has not known who to tell. Who would believe that she saw the secret marriage of the goddess? Her brothers would laugh and sneer. Her mother would tell her to stop trying to make more of herself than she is. Everyone knows all of Poliahu's stories already.

But Lani knows what she saw. And she knows something else, something deep in her heart, deep, where words give way to colors and feelings and sounds that don't come out unless she can't hold them back anymore. She knows that she and everyone she knows is living in the second age of the gods. Gods and goddesses tread the same earth that she does, the same paths that have been on the island since the first age, when the islands were first revealed to Hawaiiiloa.

He and his descendants walked among the gods as Lani and her family and everyone does today, watching them, sometimes speaking to them, offering to them, and receiving from them.

In such a time stories change. New stories are born.

Someday she would tell this story.

Critical framework: the point of fiction

In his book-length treatise *The Great Derangement: Climate Change and the Unthinkable*, Amitav Ghosh examines the reluctance of literary fiction to engage with the looming threat of atmospheric carbon on humanity. He finds it problematic that the literary world's "conception of seriousness" – i.e. the subjects and themes that the modern novel should concern itself with – does not treat large-scale threats or complications such as climate change (Ghosh 2016 p8). He notes that there are a number of fiction writers who exhibit concern over climate change effects, but like Arundhati Roy (and, he admits, Ghosh himself), they campaign through non-fiction writings. Ghosh goes so far as to call this a fundamental flaw of the modern novel: "If certain literary forms are unable to negotiate these torrents, then they will have failed" the broader cultural consciousness (Ghosh 2016 p8).

Ghosh considers this failing a crucial mistake. Once the world is fully in the grips of climate change, he says, the current era will be judged by future generations. "When readers and museumgoers turn to the art and literature of our time, will they not look... for traces and portents of the altered world of their inheritance? (W)hat can they do other than to conclude that ours was a time when most forms of art and literature were drawn into the modes of concealment that prevented people from recognizing the realities of their plight?" (Ghosh, 2016, p11)

Ghosh describes the chief "resistance" to the inclusion of climate change in the modern novel as its central form. Quoting Franco Moretti, Ghosh writes: "the novel takes its modern form through 'the relocation of the unheard-of toward the background... while the everyday moves into the foreground.'" (Ghosh, 2016, p.17) This was in direct opposition to pre-modern narratives, which dwelt on the fantastic and sensational – Ghosh mentions *The Arabian Nights* as an example (2016, p16). The modern writing movement of the 19th century rebelled against

narrative forms hundreds if not thousands of years old, such as epics, religious and mythological texts, and vernacular storytelling. The ‘partitioning’ of the modern novel has succeeded to such a degree that even relatively minor circumstances in a novel, whether a chance meeting with an old friend or a freak tornado, are met by readers and critics alike with skepticism. The ‘novelistic universe’ is “a world of few surprises, fewer adventures, and no miracles at all” (Ghosh 2016 p.19). Other ‘resistances’ include: the stable lifestyle of the novel’s audience, the newly formed bourgeoisie class; the prizing of character and observation over plot; and a fundamental world view of ‘Nature’ as moderate, gradual, and essentially benign. Ghosh points out that earlier civilization would think the Victorian ideal of gradualism ludicrous, remarking that catastrophism was likely the prevailing frame of reference for nature for most of human history (2016).

Later in his book, Ghosh mentions that the ‘resistances’ to climate change treatment in literary fiction are not insurmountable, citing two texts – Liz Jensen’s *The Rapture* and Barbara Kingsolver’s *Flight Behavior* – as exemplars that were able to pull climate change out of the realm of the fantastic (2016). Lauren Groff’s *Arcadia* (2011) is another. *Arcadia* centers on the life of Bit, ranging from his childhood at a commune in the 1960s to the then-future year of 2018. In this future, some ill effects of climate change have already been felt, including epidemics, famine, and unrest, and these circumstances have directly influenced Bit and his family.

Groff’s willingness to treat with catastrophe and contemplate the future in her fiction signaled a space for *Fire and Water*, though from its inception this text was considered a work of science fiction. Other literary critics, including Jessica Langer (*Postcolonialism and Science Fiction*, 2011), Adam Trexler (*Anthropocene Fictions*, 2015) and Eric C. Otto (*Green*

Speculations, 2012) assume that “climate fiction,” as Ghosh calls it, is a form of science fiction. Ghosh would say that science fiction is a more direct descendant of pre-modern writing, and so is free to pull material from wider concerns, such as myth, tribalism, religion, politics, science, nature, and, of course, climate change. *Fire and Water* addresses all of the above themes.

Ecocriticism.

Otto notes that, as never before in history, humans have turned away from the natural, seeking ‘wonder’ in forms of human artifice (2012). An ecocritical approach seeks, at least, to reverse that trend. Otto cites both environmental nonfiction – an important subset of creative nonfiction – and science fiction as effective conduits for ecocritical thought: “estrangement, extrapolation, and sense of wonder constitute an ecorhetorical strategy” for these written forms (2012, p17). Though others are critical of sci-fi’s approach to ‘technophilia,’ other-ing, colonialism, and other tendencies, Otto believes that science fiction has an important role to play in rendering and commenting on environmental issues such as climate change. One aspect of environmental science fiction he examines is that concerned with Arne Naess’s concept of ‘deep ecology,’ adopted first by Callenbach’s *Ecotopia* (1975) and Piercy’s *Woman on the Edge of Time* (1976). Both novels advocate radical lifestyle changes, including the abandonment of the growth-at-all-cost model of capitalist economies in favor of small, self-sustaining enclaves. The Hawaii imagined in *Fire and water* hews to this ideal. These future Hawaiians disdain commercial farming, fishing, or tourism. Instead they try to live like their ancestors did, before contact with the West. They use technology sparingly, mainly for connectivity, though some robots help with agriculture and land reclamation. Importantly, the Hawaiians’ cultural tie to the islands and their waters makes their burgeoning way of life less anthropocentric, as Otto mentions is central to ecocritical texts, allowing the earth’s non-human nature to once again

achieve agency on par with humanity. This agency is personified in the pantheon of Hawaiian myth, and Eenie's role as Poliahu's avatar, along with the otherwise unnamed Kamapua'a, and Stephens' Pele all pay tribute to that agency.

On the other end of the spectrum are ecodystopias, characterized by catastrophic breakdowns of ecology and with wide-ranging effects on humans and their institutions (Otto 2012). In the text, the world outside of Hawaii is not faring well – Australia has major problems, America has seen itself weakened and its environment degraded, and catastrophic events like the Big Soak have swamped cities and low-lying island countries worldwide. The wallowing of the world beyond pulls Hawaii's efforts into sharp focus, incentivizing Eenie and her small cohort of astronomers. There is nowhere else for them to go.

Eco-cultural politics.

Trexler looks broadly at climate fiction through four lenses. Politics is one of these. He notes that “ecocriticism... assumes that political progress will be the result of activis(m),” generally fomented by grassroots organizations or political parties (2015, p121). *Fire and water's* setting is based on a successful political move against American imperialism. The Hawaiian Cultural Reaffirmation gained hegemony over the archipelago in 2032, and in the five years before the story's opening it has done its best to rid itself of colonial and global influence. The Reaffirmation seeks to revive pre-colonial culture and a gentler mode of living with the land (the Hawaiian word for common people is *maka'ainana*, which means, roughly, people of the land). The Reaffirmation's desire, as much as possible, is for Hawaii to be self-sustaining and sustainable. Trexler notes that while much focus in the real world and in fiction is concerned with global efforts, some climate change science fiction focuses on bioregionalism, which carries with it the notion that different parts of the world will face different struggles in the era of

climate change and, assumedly, will adopt regionally-specific strategies to cope (2015). *Fire and water* is somewhat optimistic in this regard. Somehow, the Hawaiians have found a way to maintain themselves, if not prosper; they have called back their diaspora, and welcome refugees from the wider Polynesia.

Hybridity.

Though the action of *Fire and water* takes place in a postcolonial setting, the text does not lend itself well to a strict postcolonial reading. Eenie, a ‘Merican scientist and athlete, as a protagonist both elides and complicates a postcolonial perspective. She does not agree with the tribalistic impulse to preference cultural values over science, though the Reaffirmation’s fiat compels her to engage with their cultural forms to continue her work. Hybridity – in this case, the notion that any contemporary or future manifestation of a colonized place can only be an amalgam of pre- and post-Contact culture – hews closer as a critical framework for the text. Langer notes that hybridity can be destructive to cultures, places, and individuals; alternatively, it can be constructive, leading to harmony or balance; or, lastly, an imperfect solution: “the only way forward” (Langer, 2011, p109). *Fire and water* vacillates between these perspectives. At the story’s opening, Eenie contemplates the table in the Poi Poi, covered in yellowed resin that protects artifacts such as maps, menus, postcards, and other memorabilia fossilized decades before to appeal to American tourists. While many referents to a tourist economy have been purged, the table, bolted to the floor, remains, defying the Reaffirmation’s nativist impulse. So too does the geological laboratory on Maunaloa, and Maunakea’s telescope array, which she and her political ally Haru (himself another hybrid – born in Hawaii of Japanese lineage) champion. Both observatories are artifacts of a globalized, largely Western approach to research and scholarship. Though they tread on sacred ground, they advance science – a positivistic trade-off.

While one faction of Hawaiians (conservative, backward-looking, and isolationist) would like to see them gone, Haru's faction wants to keep the telescopes operational as a way to remain connected to the larger world. The maintenance of this hybrid *détente* is the central impetus for *Fire and water*.

In the text's penultimate chapter "fallen arch," Haru declares the triumph of a wider, hybrid definition of Hawaiian sovereignty over the more conservative faction promoting the *kanaka maoli* – those of Hawaiian lineage – exclusively. Haru himself is a hybrid, being born in Hawaii but of Japanese descent (*Kepani*, in Hawaiian). The text's final chapter, an epilogue of sorts, explores how the pragmatic 'making do' of the hybrid Hawaii has been accepted, codified in new stories and myths, as the young girl Lani describes herself living in the second age of the gods, sharing the island, walking in their footsteps. Lani's perspective hints at a wider cultural assimilation of Eenie and her cohort; the tales Lani will tell in the future fold the hybridized archetype of Eenie/Poliahu into the evolving mythos of the ecocentric island nation.

Hawaii today.

After more than two centuries of deracination, diaspora, and cultural sublimation, efforts to reaffirm the culture and sovereignty of Hawaii have recently made progress. This section examines the current state of Hawaii and its people, with an emphasis on the resurgence of Native Hawaiian identity and efforts towards self-determination. These contemporary moves could prefigure the ascendancy of the Hawaiian Cultural Reaffirmation that governs the islands in the story's timeframe.

Economics. The Hawaiian Kingdom was overthrown in 1893 for the benefit of *haole* American landowners, who set up large-scale agricultural plantations primarily of pineapple and sugar cane. These landowners dominated Hawaiian politics for almost a century. The

globalization of the agricultural market towards the end of the 20th century weakened the plantations' economic outlook. The last surviving plantation in Hawaii closed in December 2016 (Lyte). The end of large-scale farming freed tens of thousands of acres of land for other uses (Vukovich, e.g.). This economic decolonization opens the door for the independent future Hawaii in the text. The Hawaiians of 2037 have largely re-appropriated the islands' *'aina* (land) from *haole* landholders, reviving agricultural practices that sustained the archipelago's indigenous inhabitants for centuries.

This return to cultural wisdom is a potential advantage for Hawaiians in the era of climate change over other parts of the world. Today, academic researchers, cultural groups, and small landholders are relearning many ancestral agricultural practices, reconstructing *l'oi*, bogs for *kalo* cultivation, orchards, and tidal fishponds. Land ownership, however, remains a sticking point for large-scale sustainable agriculture, and while the islands have the potential to be incredibly fruitful, most of Hawaii's food is currently imported.

Politics. Also in 2016, the US Department of the Interior created a pathway for “government to government” negotiation with Hawaiians, the only indigenous group in the United States without official status (US Dept. of Interior website). To date, there is no consensus among Hawaiians as to the makeup and mission of a self-governing body; some envision US recognition as a way to address economic and cultural grievances internally, while others wish to secede from the United States altogether. Anticipating the rule change, a non-governmental group called N'ai Aupuni held a constitutional convention in early 2016 (Wang). The group crafted a nineteen page constitution for a Native Hawaiian government, though the document has not to date been ratified. N'ai Aupuni's legitimacy was sharply criticized by other activist Hawaiian groups. One of these, the Nation of Hawaii, advocates for a nativist Hawaiian

state (Tizon). The group negotiated a long-term lease of ceded lands from Hawaii's governor in 1994, on which it established the village of Pu`uhonua O Waimanalo as a model self-sufficient Hawaiian community (Nation of Hawaii website). This village, along with other initiatives across the state to restore native agricultural and other traditional practices, is a template for the future Hawaii of the text.

A complication of an independent Hawaiian nation is demographics. After Captain Cook made contact in 1787, the Native Hawaiian population dwindled to a low of roughly 24,000 in 1920 (Demby). Today, the *kanaka maoli* number 298,000, or 21% of the state's population (Demby). 37.3% of the state's residents are Asian, largely Japanese or Filipino, while 26.7% are white (Demby). Many of these non-Hawaiian residents are descendants of those brought to Hawaii as indentured plantation workers. The quarrel between those who would forward the rights of the *kanaka maoli* exclusively versus those who advocate for a heterogeneous Hawaiian society is figured in the text by Haru, who espouses a similarly broad inclusivity.

Culture. After a century and a half of missionary and governmental erasure of Hawaiian culture, the past forty years have seen a resurgence of self-identification. Traditional knowledge of many aspects of Hawaiian life, including agri- and aqua-culture, maritime, religious observation, and language, has been revived. While the official language of Hawaii remains English, schools and courts use both English and 'Olelo, the Hawaiian language. Today, many Hawaiian children attend *kamekehama* schools, either exclusively or as an afterschool or summer enrichment program. The schools, established in the name of the first Hawaiian king to unite the archipelago, inculcate Hawaiian language, culture, and environmental awareness, as well as enrich students in more conventional subjects.

Hawaii and astronomy. The practice of astronomy on Maunakea is at the crux of *Fire and water*. Traditionally, Kea is sacred ground, somewhat analogous to Mount Olympus of the Greeks, but also an ancestral brother to Hawaiians and, significant to the text, Kea is the home of the snow goddess Poliahu. Prior to Western contact, only *ali'i* – chiefs and other leaders – were allowed at Kea’s summit (Herman). The first telescope was built on Maunakea in 1968, encouraged by the state as a way to stimulate the economy of the Big Island (Herman). Noted as one of the best terrestrial locations for astronomic observation, Maunakea today has an array of eleven operating telescopes. The Office of Maunakea Management took over administration of the observatory from the University of Hawaii in 2000 in response to criticism of environmental degradation and cultural insensitivity (Fujii). The office oversees operations and new construction, balancing research objectives with community, cultural, and environmental concerns. A number of educational programs have been launched to promote astronomy in Hawaii, particularly in schools. The \$28 million ‘Imiloa Astronomy Center in Hilo opened in 2006 to “showcase the connections between the rich traditions of Hawaiian culture and the groundbreaking astronomical research conducted at the summit of Maunakea (“About Us”).”

Despite this outreach and improved regard for cultural and environmental imperatives, many Hawaiians remain against the presence of the telescopes on Maunakea, which they consider extremely sacred ground (Herman). A series of protests forestalled construction on the Thirty Meter Telescope in 2014 and 2015 (Lafrance). An accompanying lawsuit led to Hawaii’s Supreme Court denying the original construction permit for the telescope (Lafrance). On September 29 2017, the state’s Board of Land and Natural Resources approved an amended construction permit for the telescope (Wall), while as late as March 15, 2018, the Court again heard arguments for and against the telescope (Hurley). As of March 31, 2018, the Court has not

ruled on the most recent suit. The ongoing conflict between the secular, Westernized, academic aims of astronomic science and the religious significance of the dormant volcano drives the main action of *Fire and water*.

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