

THE PROPHET OF FLORES

by Ted Kosmatka

Ted Kosmatka tells us he's a lab rat from the north coast of Indiana. Since his first sale to Asimov's—"The God Engine" (October/November 2005)—his stories have sold to both literary and science fiction markets. He has tales forthcoming from Ideomancer and City Slab, and the play that he co-wrote, Steel and Roses, has been performed in Illinois, Indiana, and New York City. You can check out his website at www.tedkosmatka.com. Ted explores the multiverse in his third story for us and finds a dangerous road not taken by our own scientific revolution.

If this is the best of all possible worlds, what are the others like?—Voltaire

* * * *

When Paul was a boy, he played God in the attic above his parents' garage. That's what his father called it, playing God, the day he found out. That's what he called it the day he smashed it all down.

Paul built the cages out of discarded two-by-fours he'd found behind the garage, and quarter-inch mesh he bought from the local hardware store. While his father was away speaking at a scientific conference on divine cladistics, Paul began constructing his laboratory from plans he'd drawn during the last day of school.

Because he wasn't old enough to use his father's power tools, he had to use a handsaw to cut the wood for the cages. He used his mother's sturdy black scissors to snip the wire mesh. He borrowed hinges from old cabinet doors, and he borrowed nails from the rusty coffee can that hung over his father's unused workbench.

One evening his mother heard the hammering and came out to the garage. "What are you doing up there?" she asked, speaking in careful English, peering up at the rectangle of light that spilled down from the attic.

Paul stuck his head through the opening, all spiky black hair and sawdust. "I'm just playing around with some tools," he said. Which was, in some sense, the truth. Because he couldn't lie to his mother. Not directly.

"Which tools?"

“Just a hammer and some nails.”

She stared up at him, her delicate face a broken Chinese doll—pieces of porcelain re-glued subtly out of alignment. “Be careful,” she said, and he understood she was talking both about the tools and about his father.

“I will.”

The days turned into weeks as Paul worked on the cages. Because the materials were big, he built the cages big—less cutting that way. In reality, the cages were enormous, over-engineered structures, ridiculously outsized for the animals they’d be holding. They weren’t mouse cages so much as mouse cities—huge tabletop-sized enclosures that could have housed German Shepherds. He spent most of his paper route money on the project, buying odds and ends that he needed: sheets of plexi, plastic water bottles, and small dowels of wood he used for door latches. While the other children in the neighborhood played basketball or wittedandu, Paul worked.

He bought exercise wheels and built walkways; he hung loops of yarn the mice could climb to various platforms. The mice themselves he bought from a pet store near his paper route. Most were white feeder mice used for snakes, but a couple were of the more colorful, fancy variety. And there were even a few English mice—sleek, long-bodied show mice with big tulip ears and glossy coats. He wanted a diverse population, so he was careful to buy different kinds.

While he worked on their permanent homes, he kept the mice in little aquariums stacked on a table in the middle of the room. On the day he finished the last of the big cages, he released the mice into their new habitats one by one—the first explorers on a new continent. To mark the occasion, he brought his friend John over, whose eyes grew wide when he saw what Paul had made.

“You built all this?” John asked.

“Yeah.”

“It must have taken you a long time.”

“Months.”

“My parents don’t let me have pets.”

“Neither do mine,” Paul answered. “But anyway, these aren’t pets.”

"Then what are they?"

"An experiment."

"What kind of experiment?"

"I haven't figured that out yet."

* * * *

Mr. Finley stood at the projector, marking a red ellipse on the clear plastic sheet. Projected on the wall, it looked like a crooked half-smile between the X and Y axis.

"This represents the number of daughter atoms. And *this...*" He drew the mirror image of the first ellipse. "This is the number of parent atoms." He placed the marker on the projector and considered the rows of students. "Can anyone tell me what the point of intersection represents?"

Darren Michaels in the front row raised his hand. "It's the element's half-life."

"Exactly. Johnson, in what year was radiometric dating invented?"

"1906."

"By whom?"

"Rutherford."

"What method did he use?"

"Uranium lead—"

"No. Wallace, can you tell us?"

"He measured helium as an intermediate decay product of uranium."

"Good, so then who used the uranium-lead method?"

"That was Boltwood, in 1907."

“And how were these initial results viewed?”

“With skepticism.”

“By whom?”

“By the evolutionists.”

“Good.” Mr. Finley turned to Paul. “Carlson, can you tell us what year Darwin wrote *On the Origin of Species*?”

“1867, Paul said.”

“Yes, and in what year did Darwin’s theory finally lose the confidence of the larger scientific community?”

“That was 1932.” Anticipating his next question, Paul continued. “When Kohlhorster invented potassium-argon dating. The new dating method proved the earth wasn’t as old as the evolutionists thought.”

“And in what year was the theory of evolution finally debunked completely?”

“1954, when Willard F. Libby invented carbon-14 dating at the University of Chicago. He won the Nobel prize in 1960 when he used carbon dating to prove, once and for all, that the Earth was 5,800 years old.”

* * * *

Paul wore a white lab coat when he entered the attic. It was one of his father’s old coats, so he had to cut the sleeves to fit his arms. Paul’s father was a doctor, the Ph.D kind. He was blond and big and successful. He’d met Paul’s mother after grad school while consulting for a Chinese research firm. They had worked on the same projects for a while, but there was never any doubt that Paul’s father was the bright light of the family. The genius, the famous man. He was also crazy.

Paul’s father liked breaking things. He broke telephones, and he broke walls, and he broke tables. He broke promises not to hit again. One time, he broke bones; the police were called by the ER physicians who did not believe the story about Paul’s mother falling down the stairs. They did not believe the weeping

woman of porcelain who swore her husband had not touched her.

Paul's father was a force of nature, a cataclysm; as unpredictable as a comet strike or a volcanic eruption. The attic was a good place to hide, and Paul threw himself into his hobby.

Paul studied his mice as though they were Goodall's chimps. He documented their social interactions in a green spiral notebook. He found that, within the large habitats, they formed packs like wolves, with a dominant male and a dominant female—a structured social hierarchy involving mating privileges, territory, and almost-ritualized displays of submission by males of lower rank. The dominant male bred most of the females, and mice, Timothy learned, could kill each other.

Nature abhors a vacuum, and the mouse populations expanded to fill the new worlds he'd created for them. The babies were born pink and blind, but as their fur came in, Paul began documenting colors in his notebook. There were fawns, blacks, and grays. Occasional agoutis. There were Irish spotted, and banded, and broken marked. In later generations, colors appeared that he hadn't purchased, and he knew enough about genetics to realize these were recessive genes cropping up.

Paul was fascinated by the concept of genes, the stable elements through which God provided for the transfer of heritable characteristics from one generation to the next. In school they called it divine transmission.

Paul did research and found that the pigmentation loci of mice were well-mapped and well-understood. He categorized his population by phenotype and found one mouse, a pale, dark-eyed cream that must have been a triple recessive: bb, dd, ee. But it wasn't enough to just have them, to observe them, to run the Punnett squares. He wanted to do real science. Because real scientists used microscopes and electronic scales, Paul asked for these things for Christmas.

Mice, he quickly discovered, did not readily yield themselves to microscopy. They tended to climb down from the stand. The electronic scale, however, proved useful. He weighed every mouse and kept meticulous records. He considered developing his own inbred strain—a line with some combination of distinctive characteristics—but he wasn't sure what characteristics to look for.

He was going over his notebook when he saw it. January-17. Not a date, but a mouse—the seventeenth mouse born in January. He went to the cage and opened the door. A flash of sandy fur, and he snatched it up by its tail—a brindle

specimen with large ears. There was nothing really special about the mouse. It was made different from the other mice only by the mark in his notebook. Paul looked at the mark, looked at the number he'd written there. Of the more than ninety mice in his notebook, January-17 was, by two full grams, the largest mouse he'd ever weighed.

* * * *

In school they taught him that through science you could decipher the truest meaning of God's words. God wrote the language of life in four letters—A, T, C, and G. That's not why Paul did it though, to get closer to God. He did it for the simplest reason, because he was curious.

It was early spring before his father asked him what he spent his time doing in the attic.

"Just messing around."

They were in his father's car on the way home from piano lessons. "Your mother said you built something up there."

Paul fought back a surge of panic. "I built a fort a while ago."

"You're almost twelve now. Aren't you getting a little old for forts?"

"Yeah, I guess I am."

"I don't want you spending all your time up there."

"All right."

"I don't want your grades slipping."

Paul, who hadn't gotten a B in two years, said, "All right."

They rode the rest of the way in silence, and Paul explored the walls of his newly shaped reality. Because he knew foreshocks when he felt them.

He watched his father's hands on the steering wheel. Though large for his age, like his father, Paul's features still favored his Asian mother and he sometimes wondered if that was part of it, this thing between his father and him, this gulf he could not cross. Would his father have treated a freckled, blond son

any differently? No, he decided. His father would have been the same. The same force of nature; the same cataclysm. He couldn't help being what he was.

Paul watched his father's hand on the steering wheel, and years later, when he thought of his father, even after everything that happened, that's how he thought of him. That moment frozen. Driving in the car, big hands on the steering wheel, a quiet moment of foreboding that wasn't false, but was merely what it was, the best it would ever be between them.

* * * *

"What have you done?" There was wonder in John's voice. Paul had snuck him up to the attic, and now Paul held Bertha up by her tail for John to see. She was a beautiful golden brindle, long whiskers twitching.

"She's the most recent generation, an F4."

"What does that mean?"

Paul smiled. "She's kin to herself."

"That's a big mouse."

"The biggest yet. Fifty-nine grams, weighed at a hundred days old. The average weight is around forty."

Paul put the mouse on John's hand.

"What have you been feeding her?" John asked.

"Same as the other mice. Look at this." Paul showed him the charts he'd graphed, like Mr. Finley, a gentle upward ellipse between the X and Y axis—the slow upward climb in body weight from one generation to the next.

"One of my F2s tipped the scales at forty-five grams, so I bred him to the biggest females, and they made more than fifty babies. I weighed them all at a hundred days and picked the biggest four. I bred them and did the same thing the next generation, choosing the heaviest hundred-day weights. I got the same bell-curve distribution—only the bell was shifted slightly to the right. Bertha was the biggest of them all."

John looked at Paul in horror. "That works?"

“Of course it works. It’s the same thing people have been doing with domestic livestock for the last five thousand years.”

“But this didn’t take you thousands of years.”

“No. Uh, it kind of surprised me it worked so well. This isn’t even subtle. I mean, look at her, and she’s only an F4. Imagine what an F10 might look like.”

“That sounds like evolutionism.”

“Don’t be silly. It’s just directional selection. With a diverse enough population, it’s amazing what a little push can do. I mean, when you think about it, I hacked off the bottom 95 percent of the bell curve for five generations in a row. Of course the mice got bigger. I probably could have gone the other way if I’d wanted, made them smaller. There’s one thing that surprised me, though, something I only noticed recently.”

“What?”

“When I started, at least half of the mice were albino. Now it’s down to about one in ten.”

“Okay.”

“I never consciously decided to select against that.”

“So?”

“So, when I did culls ... when I decided which ones to breed, sometimes the weights were about the same, and I’d just pick. I think I just happened to pick one kind more than the other.”

“So what’s your point?”

“So what if it happens that way in nature?”

“What do you mean?”

“It’s like the dinosaurs. Or woolly mammoths, or cavemen. They were here once; we know that because we find their bones. But now they’re gone. God made all life about six thousand years ago, right?”

“Yeah.”

“But some of it isn’t here anymore. Some died out along the way.”

* * * *

It happened on a weekend. Bertha was pregnant, obscenely, monstrously. Paul had isolated her in one of the aquariums, an island unto herself, sitting on a table in the middle of the room. A little tissue box sat in the corner of her small glass cage, and Bertha had shredded bits of paper into a comfortable nest in which to give birth to the next generation of goliath mice.

Paul heard his father’s car pull into the garage. He was home early. Paul considered turning off the attic lights but knew it would only draw his father’s suspicion. Instead he waited, hoping. The garage was strangely quiet—only the ticking of the car’s engine. Paul’s stomach dropped when he heard the creak of his father’s weight on the ladder.

There was a moment of panic then—a single hunted moment when Paul’s eyes darted for a place to hide the cages. It was ridiculous; there was no place to go.

“What’s that smell?” his father asked as his head cleared the attic floor. He stopped and looked around. “Oh.”

And that was all he said at first. That was all he said as he climbed the rest of the way. He stood there like a giant, taking it in. The single bare bulb draped his eyes in shadow. “What’s this?” he said finally. His dead voice turned Paul’s stomach to ice.

“What’s this?” Louder now, and something changed in his shadow eyes. Paul’s father stomped toward him, above him.

“What’s this?” The words more shriek than question now, spit flying from his mouth.

“I, I thought—”

A big hand shot out and slammed into Paul’s chest, balling his T-shirt into a fist, yanking him off his feet.

“What the fuck is this? Didn’t I tell you no pets?” The bright light of the family, the famous man.

“They’re not pets, they’re—”

“God, it fucking stinks up here. You brought these things into the house? You brought this *vermin* into the house? Into my house!”

The arm flexed, sending Paul backward into the cages, toppling one of the tables—wood and mesh crashing to the floor, the squeak of mice and twisted hinges, months and months and months of work.

His father saw Bertha’s aquarium and grabbed it. He lifted it high over his head—and there was a moment when Paul imagined he could almost see it, almost see Bertha inside, and the babies inside her, countless generations that would never be born. Then his father’s arms came down like a force of nature, like a cataclysm. Paul closed his eyes against exploding glass, and all he could think was, *this is how it happens. This is exactly how it happens.*

* * * *

Paul Carlson left for Stanford at seventeen. Two years later, his father was dead.

At Stanford he double-majored in genetics and anthropology, taking eighteen credit hours a semester. He studied transcripts of the Dead Sea Scrolls and the Apocryphal verses; he took courses in Comparative Interpretation and Biblical Philosophy. He studied fruit flies and amphioxus. While still an undergraduate, he won a prestigious summer internship working under renowned geneticist Michael Poore.

Paul sat in classrooms while men in dark suits spun theories about Kibra and T-variants, about microcephalin-1 and haplogroup D. He learned researchers had identified structures within a family of proteins called AAA+ that were shown to initiate DNA replication, and he learned these genetic structures were conserved across all forms of life, from men to archae bacteria—the very calling card of the great designer.

Paul also studied the banned texts. He studied balancing equilibriums and Hardy-Weinburg; but alone at night, walking the dark halls of his own head, it was the trade-offs that fascinated him most. Paul was a young man who understood trade-offs.

He learned of the recently discovered Alzheimer's gene, APOE4—a gene common throughout much of the world; and he learned theories about how deleterious genes grew to such high frequencies. Paul learned that although APOE4 caused Alzheimer's, it also protected against the devastating cognitive consequences of early childhood malnutrition. The gene that destroys the mind at seventy, saves it at seven months. He learned that people with sickle cell trait are resistant to malaria; and heterozygotes for cystic fibrosis are less susceptible to cholera; and people with type A blood survived the plague at higher frequencies than other blood types, altering forever, in a single generation, the frequency of blood types in Europe. A process, some said, now being slow-motion mimicked by the gene CKR5 and HIV.

In his anthropology courses, Paul learned that all humans alive today could trace their ancestry back to Africa, to a time almost six thousand years ago when the whole of human diversity existed within a single small population. And there had been at least two dispersions out of Africa, his professors said, if not more—a genetic bottleneck in support of the Deluvian Flood Theory. But each culture had its own beliefs. Muslims called it Allah. Jews, Yahweh. The science journals were careful not to call it God anymore; but they spoke of an intelligent designer—an architect, lowercase “a.” Though in his heart of hearts, Paul figured it all amounted to the same thing.

Paul learned they'd scanned the brains of nuns, looking for the God spot, and couldn't find it. He learned about evolutionism. Although long debunked by legitimate science, adherents of evolutionism still existed—their beliefs enjoying near immortality among the fallow fields of pseudo-science, cohabitating the fringe with older belief systems like astrology, phrenology, and acupuncture. Modern evolutionists believed the various dating systems were all incorrect; and they offered an assortment of unscientific explanations for how the isotope tests could all be wrong. In hushed tones, some even spoke of data tampering and conspiracies.

The evolutionists ignored the accepted interpretation of the geological record. They ignored the miracle of the placenta and the irreducible complexity of the eye.

During his junior and senior years, Paul studied archaeology. He studied the ancient remains of Homo erectus, and Homo neanderthalensis. He studied the un-Men; he studied Afarensis, and Australopithecus, and Pan.

In the world of archeology, the line between Man and un-Man could be

fuzzy—but it was never unimportant. To some scientists, *Homo erectus* was a race of Man long dead, a withered branch on the tree of humanity. To those more conservative, he wasn't Man at all; he was other, a hiccup of the creator, an independent creation made from the same tool box. But that was an extreme viewpoint. Mainstream science, of course, accepted the use of stone tools as the litmus test. Men made stone tools. Soulless beasts didn't. Of course there were still arguments, even in the mainstream. The fossil KNM ER 1470, found in Kenya, appeared so perfectly balanced between Man and un-Man that a new category had to be invented: near-Man. The arguments could get quite heated, with both sides claiming anthropometric statistics to prove their case.

Like a benevolent teacher swooping in to stop a playground fight, the science of genetics arrived on the scene. Occupying the exact point of intersection between Paul's two passions in life—genetics and anthropology—the field of paleometagenomics was born.

Paul received a bachelor's degree in May and started a graduate program in September. Two years and an advanced degree later, he moved to the East Coast to work for Westing Genomics, one of the foremost genetics research labs in the world.

Three weeks after that, he was in the field in Tanzania, learning the proprietary techniques of extracting DNA from bones 5,800 years old. Bones from the very dawn of the world.

* * * *

Two men stepped into the bright room.

"So this is where the actual testing is done?" It was a stranger's voice, the accent urban Australian.

Paul lifted his eyes from the microscope and saw his supervisor accompanied by an older man in a gray suit.

"Yes," Mr. Lyons said.

The stranger shifted weight to his teak cane. His hair was short and gray, parted neatly on the side.

"It never ceases to amaze," the stranger said, glancing around. "How alike laboratories are across the world. Cultures who cannot agree on anything agree

on this: how to design a centrifuge, where to put the test tube rack, what color to paint the walls—white, always. The bench tops, black.”

Mr. Lyons nodded. Mr. Lyons was a man who wore his authority like a uniform two sizes too large; it required constant adjustment to look presentable.

Paul stood, pulled off his latex gloves.

“Gavin McMaster,” the stranger said, sticking out a hand. “Pleased to make your acquaintance, Mr. Carlson.”

They shook.

“Paul. You can call me Paul.”

“I apologize for interrupting your work,” Gavin said.

“It’s time I took a break anyway.”

“I’ll leave you two to your discussion,” Mr. Lyons said, and excused himself.

“Please,” Paul said, gesturing to a nearby work table. “Take a seat.”

Gavin sank onto the stool and set his briefcase on the table. “I promise I won’t take much of your time,” he said. “But I did need to talk to you. We’ve been leaving messages for the last few days and—”

“Oh.” Paul’s face changed. “You’re from—”

“Yes.”

“This is highly unusual for you to contact me here.”

“I can assure you these are very unusual circumstances.”

“Still, I’m not sure I like being solicited for one job while working at another.”

“I can see there’s been a misunderstanding.”

“How’s that?”

"You called it a job. Consider it a consulting offer."

"Mr. McMaster, I'm very busy with my current work. I'm in the middle of several projects, and, to be honest, I'm surprised Westing let you through the door."

"Westing is already onboard. I took the liberty of speaking to the management before contacting you today."

"How did you..." Paul looked at him, and Gavin raised an eyebrow. With corporations, any question of "how" was usually rhetorical. The answer was always the same. And it always involved dollar signs.

"Of course, we'll match that bonus to you, mate." McMaster slid a check across the counter. Paul barely glanced at it.

"As I said, I'm in the middle of several projects now. One of the other samplers here would probably be interested."

McMaster smiled. "Normally I'd assume that was a negotiating tactic. But that's not the case here, is it?"

"No."

"I was like you once. Hell, maybe I still am."

"Then you understand." Paul stood.

"I understand you better than you think. It makes it easier, sometimes, when you come from money. Sometimes I think that only people who come from it realize how worthless it really is."

"That hasn't been my experience. If you'll excuse me." Politeness like a wall, a thing he'd learned from his mother.

"Please," Gavin said. "Before you leave, I have something for you." He opened the snaps on his briefcase and pulled out a stack of glossy eight-by-ten photographs.

For a moment Paul just stood there. Then he took the photos from Gavin's extended hand. Paul looked at the pictures. Paul looked at them for a long time.

Gavin said, "These fossils were found last year on the island of Flores, in Indonesia."

"Flores," Paul whispered, still studying the photos. "I heard they found strange bones there. I didn't know anybody had published."

"That's because we haven't. Not yet, anyway."

"These dimensions can't be right. A six-inch ulna."

"They're right."

Paul looked at him. "Why me?" And just like that, the wall was gone. What lived behind it had hunger in its belly.

"Why not?"

It was Paul's turn to raise an eyebrow.

"Because you're good," Gavin said.

"So are others."

"Because you're young and don't have a reputation to risk."

"Or one to stand on."

Gavin sighed. "Because I don't know if archaeology was ever meant to be as important as it has become. Will that do for an answer? We live in a world where zealots become scientists. Tell me, boy, are you a zealot?"

"No."

"That's why. Or close enough."

There were a finite number of unique creations at the beginning of the world—a finite number of species which has, since that time, decreased dramatically through extinction. Speciation is a special event outside the realm of natural processes, a phenomenon relegated to the moment of creation, and to the mysteries of Allah.

—Expert witness, heresy trials, Ankara, Turkey.

* * * *

The flight to Bali was seventeen hours, and another two to Flores by chartered plane—then four hours by Jeep over the steep mountains and into the heart of the jungle. To Paul, it might have been another world. Rain fell, stopped, then fell again, turning the road into a thing which had to be reasoned with.

“Is it always like this?” Paul asked.

“No,” Gavin said. “In the rainy season, the roads are much worse.”

Flores, isle of flowers. From the air it had looked like a long ribbon of jungle thrust from blue water, part of a rosary of islands between Australia and Java. The Wallace Line—a line more real than any on a map—lay kilometers to the west, toward Asia and the empire of placental mammals. A stranger emperor ruled here.

Paul was exhausted by the time they pulled into Ruteng. He rubbed his eyes. Children ran alongside the Jeep, their faces some combination of Malay and Papuan—brown skin, strong white teeth like a dentist’s dream. The hill town crouched one foot in the jungle, one on the mountain. A valley flung itself from the edge of the settlement, a drop of kilometers.

The men checked into their hotel. Paul’s room was basic, but clean, and Paul slept like the dead. The next morning he woke, showered and shaved. Gavin met him in the lobby.

“It’s a bit rustic, I apologize.” Gavin said.

“No, it’s fine.” Paul said. “There was a bed and a shower. That’s all I needed.”

“We use Ruteng as a kind of base camp for the dig. Our future accommodations won’t be quite so luxurious.”

Back at the Jeep, Paul checked his gear. It wasn’t until he climbed into the passenger seat that he noticed the gun, its black leather holster duct-taped to the driver’s door. It hadn’t been there the day before.

Gavin caught him staring. “These are crazy times we live in, mate. This is a place history has forgotten till now. Recent events have made it remember.”

"Which recent events are those?"

"Religious events to some folks' view. Political to others." Gavin waved his hand. "More than just scientific egos are at stake with this find."

They drove north, descending into the valley and sloughing off the last pretense of civilization. "You're afraid somebody will kidnap the bones?" Paul asked.

"Yeah, that's one of the things I'm afraid of."

"One?"

"It's easy to pretend that it's just theories we're playing with—ideas dreamed up in some ivory tower between warring factions of scientists. Like it's all some intellectual exercise." Gavin looked at him, his dark eyes grave. "But then you see the actual bones; you feel their weight in your hands, and sometimes theories die between your fingers."

The track down to the valley floor was all broken zig-zags and occasional, rounding turns. For long stretches, overhanging branches made a tunnel of the roadway—the jungle a damp cloth slapping at the windshield. But here and there that damp cloth was yanked aside, and out over the edge of the drop you could see a valley that Hollywood would love, an archetype to represent all valleys, jungle floor visible through jungle haze. In those stretches of muddy road, a sharp left pull on the steering wheel would have gotten them there quicker, deader.

"Liang Bua," Gavin called their destination. "The Cold Cave." And Gavin explained that was how they thought it happened—the scenario. This steamy jungle all around, so two or three of them went inside to get cool, to sleep. Or maybe it was raining, and they went in the cave to get dry—only the rain didn't stop, and the river flooded, as it sometimes still did, and they were trapped inside the cave by the rising waters, their drowned bodies buried in mud and sediment.

The men rode in silence for a while before Gavin said it, a third option Paul felt coming. "Or they were eaten there."

"Eaten by what?"

"*Homo homini lupus est.*" Gavin said. "Man is wolf to man."

They crossed a swollen river, water rising to the bottom of the doors. For a

moment Paul felt the current grab the Jeep, pull, and it was a close thing, Gavin cursing and white-knuckled on the wheel, trying to keep them to the shallows. When they were past it he said, "You've got to keep it to the north; if you slide a few feet off straight, the whole bugger'll go tumbling downriver."

Paul didn't ask him how he knew.

Beyond the river was the camp. Researchers in wide-brimmed hats or bandanas. Young and old. Two or three shirtless. A dark-haired woman in a white shirt sat on a log outside her tent. The one feature unifying them all, good boots.

Every head followed the Jeep, and when the Jeep pulled to a stop, a small crowd gathered to help unpack. Gavin introduced him around. Eight researchers, plus two laborers still in the cave. Australian mostly. Indonesian. One American.

"Herpetology, mate," one of them said when he shook Paul's hand. Small, stocky, red-bearded; he couldn't have been more than twenty-two. Paul forgot his name the moment he heard it, but the introduction, "Herpetology, mate," stuck with him. "That's my specialty," the small man continued. "I got mixed up in this because of Professor McMaster here. University of New England, Australia." His smile was two feet wide under a sharp nose that pointed at his own chin. Paul liked him instantly.

When they'd finished unpacking the Jeep, Gavin turned to Paul. "Now I think it's time we made the most important introductions," he said.

It was a short walk to the cave. Jag-toothed limestone jutted from the jungle, an overhang of vine, and beneath that, a dark mouth. The stone was the brown-white of old ivory. Cool air enveloped him, and entering Liange Bua was a distinct process of stepping down. Once inside, it took Paul's eyes a moment to adjust. The chamber was thirty meters wide, open to the jungle in a wide crescent—mud floor, low-domed ceiling. There was not much to see at first. In the far corner, two sticks angled from the mud, and when he looked closer, Paul saw the hole.

"Is that it?"

"That's it."

Paul took off his backpack and stripped the white paper suit out of its plastic wrapper. "Who else has touched it?"

"Talford, Margaret, me."

"I'll need blood samples from everybody for comparison assays."

"DNA contamination?"

"Yeah."

"We stopped the dig when we realized the significance."

"Still. I'll need blood samples from anybody who has dug here, anybody who came anywhere near the bones. I'll take the samples myself tomorrow."

"I understand. Is there anything else you need?"

"Solitude." Paul smiled. "I don't want anybody in the cave for this part."

Gavin nodded and left. Paul broke out his tarps and hooks. It was best if the sampler was the person who dug the fossils out of the ground—or better yet, if the DNA samples were taken when the bones were still *in* the ground. Less contamination that way. And there was always contamination. No matter what precautions were taken, no matter how many tarps, or how few people worked at the site, there was still always contamination.

Paul slid down into the hole, flashlight strapped to his forehead, white paper suit slick on the moist earth. From his perspective, he couldn't tell what the bones were—only that they were bones, half buried in earth. From his perspective, that's all that mattered. The material was soft, un-fossilized; he'd have to be careful.

It took nearly seven hours. He snapped two dozen photographs, careful to keep track of which samples came from which specimens. Whoever these things were, they were small. He sealed the DNA samples into small, sterile lozenges for transport.

It was night when he climbed from under the tarp.

Outside the cave, Gavin was the first to find him in the firelight. "Are you finished?"

"For tonight. I have six different samples from at least two different individuals. Shouldn't take more than a few days."

McMaster handed him a bottle of whiskey.

“Isn’t it a little early to celebrate?”

“Celebrate? You’ve been working in a grave all night. In America, don’t they drink after funerals?”

* * * *

That night over the campfire, Paul listened to the jungle sounds and to the voices of scientists, feeling history congeal around him.

“Suppose it isn’t.” Jack was saying. Jack was thin and American and very drunk. “Suppose it isn’t in the same lineage with us, then what would that mean?”

The red-bearded herpetologist groaned. His name was James. “Not more of that doctrine of descent bullshit,” he said.

“Then what is it?” someone added.

They passed the drink around, eyes occasionally drifting to Paul as if he were a priest come to grant absolution—his sample kit just an artifact of his priestcraft. Paul swigged the bottle when it came his way. They’d finished off the whiskey long ago; this was some local brew brought by laborers, distilled from rice. Paul swallowed fire.

Yellow-haired man saying, “It’s the truth,” but Paul had missed part of the conversation, and for the first time he realized how drunk they all were; and James laughed at something, and the woman with the white shirt turned and said, “Some people have nicknamed it the ‘hobbit.’”

“What?”

“Flores Man—the hobbit. Little people three feet tall.”

“Tolkien would be proud,” a voice contributed.

“A mandible, a fairly complete cranium, parts of a right leg and left innominate.”

“But what is it?”

“Hey, are you staying on?”

The question was out there for two beats before Paul realized it was aimed at him. The woman’s eyes were brown and searching across the fire. “Yeah,” he said. “A few more days.”

Then the voice again, “But what is it?”

Paul took another swallow—trying to cool the voice of panic in his head.

* * * *

Paul learned about her during the next couple of days, the girl with the white shirt. Her name was Margaret. She was twenty-eight. Australian. Some fraction aborigine on her mother’s side, but you could only see it for sure in her mouth. The rest of her could have been Dutch, English, whatever. But that full mouth: teeth like Ruteng children, teeth like dentists might dream. She tied her brown hair back from her face, so it didn’t hang in her eyes while she worked in the hole. This was her sixth dig, she told him. “This is the one.” She sat on the stool while Paul took her blood, a delicate index finger extended, red pearl rising to spill her secrets. “Most archaeologists go a whole lifetime without a big find,” she said. “Maybe you get one. Probably none. But this is the one I get to be a part of.”

“What about the Leakeys?” Paul asked, dabbing her finger with cotton.

“Bah.” She waved at him in mock disgust. “They get extra. Bloody Kennedys of archaeology.”

Despite himself, Paul laughed.

This brings us to the so-called doctrine of common descent, whereby each species is seen as a unique and individual creation. Therefore all men, living and dead, are descended from a common one-time creational event. To be outside of this lineage, no matter how similar in appearance, is to be other than Man.
—Journal of Heredity

* * * *

That evening, Paul helped Gavin pack the Jeep for a trek back up to Ruteng. “I’m driving our laborers back to town,” Gavin told him. “They work one week on, one off. You want me to take your samples with me?”

Paul shook his head. "Can't. There are stringent protocols for chain of possession."

"Where are they now?"

Paul patted the cargo pocket of his pant leg.

"So when you get those samples back, what happens next?"

"I'll hand them over to an evaluation team."

"You don't test them yourself?"

"I'll assist, but there are strict rules. I test animal DNA all the time, and the equipment is all the same. But genus *Homo* requires a license and oversight."

"All right, mate, then I'll be back tomorrow evening to pick you up." Gavin went to the Jeep and handed Paul the sat phone. "In case anything happens while I'm gone."

"Do you think something will?"

"No," Gavin said. Then, "I don't know."

Paul fingered the sat phone, a dark block of plastic the size of a shoe. "What are you worried about?"

"To be honest, bringing you here has brought attention we weren't ready for. I received a troubling call today. So far, we've shuffled under the radar, but now ... now we've flown in an outside tech, and people want to know why."

"What people?"

"Official people. Indonesia is suddenly very interested."

"Are you worried they'll shut down the dig?"

Gavin smiled. "Have you studied theology?"

"Why?"

"I've long been fascinated by the figure of Abraham. Are you familiar with Abraham?"

"Of course," Paul said, unsure where this was going.

"From this one shepherd stems the entire natural history of monotheism. He's at the very foundation of all three Abrahamic faiths—Judaism, Christianity, and Islam. When Jews, Christians, and Muslims get on their knees for their One True God, it is to Abraham's God they pray." Gavin closed his eyes. "And still there is such fighting over steeples."

"What does this have to do with the dig?"

"The word 'prophet' comes from the Greek, *prophetes*. In Hebrew, the word is *nabi*. I think Abraham Heschel said it best when he wrote 'the prophet is the man who feels fiercely.' What do you think, Paul? Do you think prophets feel fiercely?"

"Why are you asking me this?"

"Oh, never mind." Gavin smiled again and shook his head. "It's just the rambling of an old man."

"You never answered whether you thought they'd shut down the dig."

"We come onto their land, their territory; we come into this place and we find bones that contradict their beliefs; what do you think might happen? Anything."

"Contradict their beliefs?" Paul said. "What do you believe about these bones? You've never said."

"I don't know. They could be pathological."

"That's what they said about the first Neanderthal bones. Except they kept finding them."

"It could be microcephaly."

"What kind of microcephaly makes you three feet tall?"

"The odd skull shape and small body-size could be unrelated. Pygmies

aren't unknown to these islands."

"There are no pygmies this small."

"But perhaps the two things together ... perhaps the bones are a microcephalic representation of..." his voice trailed off. Gavin sighed. He looked suddenly defeated.

"That's not what you believe, is it?" Paul said.

"These are the smallest bones discovered that look anything like us. Could they just be pathological humans? I don't know. Maybe. Pathology could happen anywhere, so we can't rule it out when we've only got a few specimens to work with. But what my mind keeps coming back to is that these bones weren't found just anywhere."

"What do you mean?"

"These bones weren't found in Africa, or Asia. These tiny bones were found on a tiny island. Near the bones of dwarf elephants. And that's a coincidence? They hunted dwarf elephants, for God's sake."

"So if not pathological, what do you believe they were? You still haven't said."

"That's the powerful thing about genetics, my friend. One does not have to believe. One can know. And that's precisely what is so dangerous."

* * * *

"Strange things happen on islands." Margaret's white shirt was gone. She sat slick-armed in overalls. Skin like a fine coat of gloss. The firelight beat the night back, lighting candles in their eyes. It was nearly midnight, and the researchers sat in a circle, listening to the crackle of the fire. Listening to the jungle.

"Like the Galápagos," she said. "The finches."

"Oh come on," James said. "The skulls we found are small, with brains the size of chimps. Island dwarfing of genus *Homo*; is that what you're proposing? Some sort of local adaptation over the last five thousand years?"

"It's the best we have."

"Those bones are too different. They're not of our line."

"But they're younger than the other archaics. It's not like *erectus*, some branch cut down at the dawn of time. These things survived here for a long time. The bones aren't even fossilized."

"It doesn't matter, they're still not us. Either they share common descent from Man, or they were a separate creation at the beginning. There is no in-between. And they're only a meter tall, don't forget."

"That's just an estimate."

"A good estimate."

"Achondroplasia—"

"Those skulls are as achondroplastic as I am. I'd say the sloped frontal bone is *anti*-achondroplastic."

"Some kind of growth hormone deficiency would—"

"No," Paul said, speaking for the first time. Every face turned toward him.

"No, what?"

"Pygmies have normal growth hormone levels," Paul said. "Every population studied—the negritos, the Andaman, the Congolese. All normal."

The faces stared. "It's the circulating domain of their receptors that are different," Paul continued. "Pygmies are pygmies because of their GH receptors, not the growth hormone itself. If you inject a pygmy child with growth hormone, you still get a pygmy."

"Well still," Margaret said. "I don't see how that impacts whether these bones share common descent or not."

James turned to the circle of faces. "So are they on our line? Are they us, or other?"

"Other."

"Other."

"Other."

Softly, the girl whispered in disbelief, "But they had stone tools."

The faces turned to Paul, but he only watched the fire and said nothing.

* * * *

The next morning started with a downpour. The dig team huddled in tents, or under the tarped lean-to near the fire pit. Only James braved the rain, stomping off into the jungle. He was back in an hour, smiling ear to ear.

"Well, will you look at that," James said, holding something out for Paul to see.

"What is it?"

"Partially eaten monitor. A species only found here."

Paul saw now that it was a taloned foot that James held. "That's a big lizard."

"Oh, no. This was just a juvenile. Mother nature is odd this side of the Wallace line. Not only are most of the species on this side not found anywhere else. A lot of them aren't even vaguely related to anything else. It's like God started from scratch to fill all the niches."

"How'd you get interested in herpetology?" Paul asked.

"By His creations shall ye know God."

"McMaster mentioned a dwarf elephant."

"Yeah, stegadon. They're extinct now, though."

"What killed them off?"

"Same thing that killed off a lot of the ancient fauna on the island. Classic catastrophism, a volcanic eruption. We found the ash layer just above the youngest bones."

* * * *

Once, lying in bed with a woman, Paul had watched the moon through the window. The woman traced his scars with her finger.

“Your father was brutal.”

“No,” Paul had said. “He was broken, that’s all.”

“There’s a difference?”

“Yeah.”

“What?”

“He was always sorry afterward.”

“That mattered?”

“Every single time.”

* * * *

A: Incidences of local adaptation have occurred, sure. Populations adapt to changing conditions all the time.

Q: Through what process?

A: Differential reproductive success. Given genetic variability, it almost has to happen. It’s just math and genes. Fifty-eight hundred years is a long time.

Q: Can you give an example?

A: Most dogs would fall into this category, having been bred by man to suit his needs. While physically different from each other, when you study their genes, they’re all one species—though admittedly divided into several distinct clades.

Q: So you’re saying God created the original dog, but Man bred the different varieties?

A: You called it God, not me. And for the record, honey, God created the gray wolf. Man created dogs.

—excerpted from the trial of geneticist Michael Poore

* * * *

It came the next morning in the guise of police action. It came in shiny new

Daihatsus with roll-bars and off-road tires. It came with guns. Mostly, it came with guns.

Paul heard them before he saw them, men shouting in a language he could not understand. He was with James at the cave's entrance. When Paul saw the first assault rifle, he sprinted for the tents. He slid the DNA lozenges into a pouch in his belt and punched numbers on the sat phone. Gavin picked up on the second ring. "The police are here," Paul said.

"Good Lord, I just spoke to officials today," Gavin said. There was shouting outside the tents—angry shouts. "They assured me nothing like this would happen."

"They lied."

Behind him, James said, "This is bad. This is very bad."

"Where are you?" Paul asked.

"I'm still in Ruteng," Gavin said.

"Then this will be over by the time you can get here."

"Paul, it's not safe for you th—"

Paul hung up. *Tell me something I don't know.*

He took his knife from his sample kit and slit the back of the tent open. He slid through, James following close behind. Paul saw Margaret standing uncertain at the edge of the jungle. Their eyes met and Paul motioned toward the Jeeps; on the count of three, they all ran for it.

They climbed in and shut the doors. The soldiers—for that's what Paul knew they were now—the soldiers didn't notice them until Paul started the engine. Malay faces swung around, mouths open in shouts of outrage.

"You'll probably want your seatbelts on for this," Paul said. Then he gunned it, spitting dirt.

* * * *

"Don't shoot," James whispered in the backseat, eyes closed in prayer.

“What?” Paul said.

“If they shoot, they’re not police.”

A round smashed through the rear window and blew out a chunk of the front windshield, spidering the safety glass.

“Shit!” Margaret screamed.

A quick glance in the rear-view, and Paul saw soldiers climbing into one of the Daihatsus. Paul yanked the wheel right.

“Not that way!” Margaret shouted. Paul ignored her and floored the accelerator.

Jungle whipped past, close enough to touch. Ruts threatened to buck them from the cratered roadway. A Daihatsu whipped into view behind them. Shots rang out, a sound like Chinese firecrackers, the ding of metal. They rounded the bend, and the river came into view—big and dumb as the sky. Paul gunned the engine.

“We’re not going to make it across!” James shouted.

“We only need to get halfway.”

Another shot slammed into the back of the Jeep.

They hit the river like a slow-speed crash, water roaring up and over the broken windshield—the smell of muck suddenly overpowering.

Paul stomped his foot to the floor.

The Jeep chugged, drifted, caught gravel. They got about halfway across before Paul yanked the steering wheel to the left. The world came unstuck and started to shift. The right front fender came up, rocking with the current. The engine died. They were floating.

Paul looked back. The pursuing vehicle skidded to a halt at the shoreline, and men jumped out. The Jeep heaved, one wheel pivoting around a submerged rock.

"Can you swim?" Paul asked.

"Now you ask us?"

"I'd unbuckle if I were you."

The Jeep hit another rock, metal grinding on stone, then sky traded places with water, and everything went dark.

* * * *

They dragged themselves out of the water several miles downriver, where a bridge crossed the water. They followed the dirt road to a place called Rea. From there they took a bus. Margaret had money.

They didn't speak about it until they arrived at Bajawa.

"Do you think they're okay?" Margaret asked.

"I think it wouldn't serve their purpose to hurt the dig team. They only wanted the bones."

"They shot at us."

"Because they assumed we had something they wanted. They were shooting at the tires."

"No," she said. "They weren't."

Three rented nights in the hotel room, and James couldn't leave—that hair like a great big handle anybody could pick up and carry, anybody with eyes and a voice. Some of the locals hadn't seen red hair in their lives, and James's description was prepackaged for easy transport. Paul, however, blended—just another vaguely Asian set of cheekbones in the crowd, even if he was a half a foot taller than the locals.

* * * *

That night, staring at the ceiling from one of the double beds, James said, "If those bones aren't us ... then I wonder what they were like."

"They had fire and stone tools," Paul said. "They were probably a lot like

us.”

“We act like we’re the chosen ones, you know? But what if it wasn’t like that?”

“Don’t think about it,” Margaret said.

“What if God had all these different varieties ... all these different walks, these different options at the beginning, and we’re just the ones who killed the others off?”

“Shut up,” she said.

“What if there wasn’t just one Adam, but a hundred Adams?”

“Shut the fuck up, James.”

There was a long quiet, the sound of the street filtering through the thin walls. “Paul,” James said. “If you get your samples back to your lab, you’ll be able to tell, won’t you?”

Paul was silent. He thought of the evaluation team and wondered.

“The winners write the history books,” James said. “Maybe the winners write the bibles, too. I wonder what religion died with them.”

* * * *

The next day, Paul left to buy food. When he returned Margaret was gone.

“Where is she?”

“She left to find a phone. She said she’d be right back.”

“Why didn’t you stop her?”

“I couldn’t.”

Day turned into evening. By darkness, they both knew she wasn’t coming back.

“How are we going to get home?” James asked.

“I don’t know.”

“And your samples. Even if we got to an airport, they’d never let you get on the plane with them. You’ll be searched. They’ll find them.”

“We’ll find a way once things have settled down.”

“Things are never going to settle down.”

“They will.”

“No, you still don’t get it. When your entire culture is predicated on an idea, you can’t afford to be proven wrong.”

* * * *

Out of deep sleep, Paul heard it. Something.

He’d known this was coming, though he hadn’t been aware that he’d known, until that moment. The creak of wood, the gentle breeze of an open door. Shock and awe would have been better—an inrush of soldiers, an arrest of some kind, expulsion, deportation, the legal system. A silent man in the dark meant many things. None of them good. The word assassin rose up in his mind.

Paul breathed. There was a cold in him—a part of him that was dead, a part of him that could never be afraid. A part of him his father had put there. Paul’s eyes searched the shadows and found it, the place where a shadow moved, a breeze that eased across the room. If there was only one, he had a chance.

Paul thought of making a run for it, sprinting for the door, leaving the samples and this place behind; but James, still sleeping, stopped him. He made up his mind.

Paul exploded from the bed, flinging the blanket ahead of him, wrapping that part of the darkness; and a shape moved, darkness like a puma’s spots, black on black—there even though you can’t see it. And Paul knew he’d surprised him, that darkness, and he knew, instantly, that it wouldn’t be enough. A blow rocked Paul off his feet, forward momentum carrying him into the wall. The mirror shattered, glass crashing to the floor.

“What the fuck?” James hit the light, and suddenly the world snapped into

existence, a flashbulb stillness—and the assassin was Indonesian, preternatural silence coming off him like a heat shimmer. He carried endings with him, nothingness in a long blade. The insult of it hit home. The shocking fucking insult, standing there, knees bent, bright blade in one hand—blood on reflective steel. That's when Paul felt the pain. It was only then he realized he'd already been opened.

And the Indonesian moved fast. He moved so fast. He moved faster than Paul's eyes could follow, covering distance like thought, across the room to James, who had time only to flinch before the knife parted him. Such a professional, and James' eyes went wide in surprise. Paul moved using the only things he had, size, strength, momentum. He hit the assassin like a linebacker, sweeping him into his arms, crushing him against the wall. Paul felt something snap, a twig, a branch, something in the Indonesian's chest—and they rolled apart, the assassin doing something with his hands; the rasp of blade on bone, a new blackness, and Paul flinched from the blow, feeling the steel leave his eye socket.

There was no anger. It was the strangest thing. To be in a fight for his life and not be angry. The assassin came at him again, and it was only Paul's size that saved him. He grabbed the arm and twisted, bringing the fight to the floor. A pushing down of his will into three square inches of the Indonesian's throat—a caving-in like a crumpling aluminum can, but Paul still held on, still pushed until the lights went out of those black eyes.

"I'm sorry," he said. "I'm sorry."

Paul rolled off him and collapsed to the floor. He crawled over to James. It wasn't a pool of blood. It was a swamp, the mattress soggy with it. James lay on the bed, still conscious.

"Don't bleed on me, man," James said. "No telling what you Americans might carry. Don't want to have to explain it to my girlfriend."

Paul smiled at the dying man, crying and bleeding on him, wiping the blood from his beard with a pillowcase. He held James's hand until he stopped breathing.

* * * *

Paul's eye opened to white. He blinked. A man in a suit sat in the chair next to the hospital bed. A man in a police uniform stood near the door. "Where am I?" Paul asked. He didn't recognize his own voice. It was an older man. Who'd eaten

glass.

"Maumere," the suited man said. He was white, mid-thirties, lawyer written all over him.

"How long?"

"A day."

Paul touched the bandage over his face. "Is my eye..."

"I'm sorry."

Paul took the news with a nod. "How did I get here?"

"They found you naked in the street. Two dead men in your room."

"So what happens now?"

"Well that depends on you." The man in the suit smiled. "I'm here at the behest of certain parties interested in bringing this to a quiet close."

"Quiet?"

"Yes."

"Where is Margaret? Mr. McMaster?"

"They were put on flights back to Australia this morning."

"I don't believe you."

"Whether you believe or not is of no consequence to me. I'm just answering your questions."

"What about the bones?"

"Confiscated for safekeeping, of course. The Indonesians have closed down the dig. It is their cave, after all."

"What about my DNA samples in the hotel room, the lozenges?"

"They've been confiscated and destroyed."

Paul sat quietly.

"How did you end up in the street?" the suit asked.

"I walked."

"How did you end up naked?"

"I figured it was the only way they'd let me live. The only way to prove I didn't have the samples. I was bleeding out. I knew they'd still be coming."

"You are a smart man, Mr. Carlson. So you figured you'd let them have the samples?"

"Yeah," Paul said.

The suited man stood and left the room.

"Mostly." Paul said.

* * * *

On the way to the airport, Paul told the driver to pull over. He paid the fare and climbed out. He took a bus to Bengali, and from there took a cab to Rea.

He climbed on a bus in Rea, and as it bore down the road, Paul yelled, "Stop!"

The driver hit the brakes. "I'm sorry," Paul said. "I've forgotten something." He climbed off the bus and walked back to town. No car followed.

Once in town, down one of the small side streets, he found it, the flower pot with the odd pink plant. He scooped dirt out of the base.

The old woman shouted something at him. He held out money, "For the plant," he said. "I'm a flower lover." She might not have understood English, but she understood money.

He walked with the plant under his arm. James had been right about some things. Wrong about others. Not a hundred Adams, no. Just two. All of Australoid

creation like some parallel world. *And you shall know God by His creations*. But why would God create two Adams? That's what Paul had wondered. The answer was that He wouldn't.

Two Adams. Two gods. One on each side of the Wallace Line.

Paul imagined it began as a competition. A line drawn in the sand, to see whose creations would dominate.

Paul understood the burden Abraham carried, to witness the birth of a religion.

As Paul walked through the streets he dug his fingers through the dirt. His fingers touched it, and he pulled the lozenge free. The lozenge no evaluation team would ever lay eyes on. He would make sure of that.

He passed a woman in a doorway, an old woman with a beautiful, full mouth. He thought of the bones in the cave, and of the strange people who had once crouched on this island.

He handed her the flower. "For you," he said.

He hailed a cab and climbed inside. "Take me to the airport."

As the old cab bounced along the dusty roads, Paul took off his eye-patch. He saw the cabbie glance into his rear-view and then look away, repulsed.

"They lied, you see," Paul told the cabbie. "About the irreducible complexity of the eye. Oh, there are ways."

The cabbie turned his radio up, keeping his face forward. Paul grimaced as he unpacked his eye, pulling white gauze out in long strips—pain exploding in his skull.

"A prophet is one who feels fiercely," he said, then slid the lozenge into his empty eye socket.