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J-Line to Nowhere
by ZENNA HENDERSON

Sweet Helen
by CHARLES W. RUNYON

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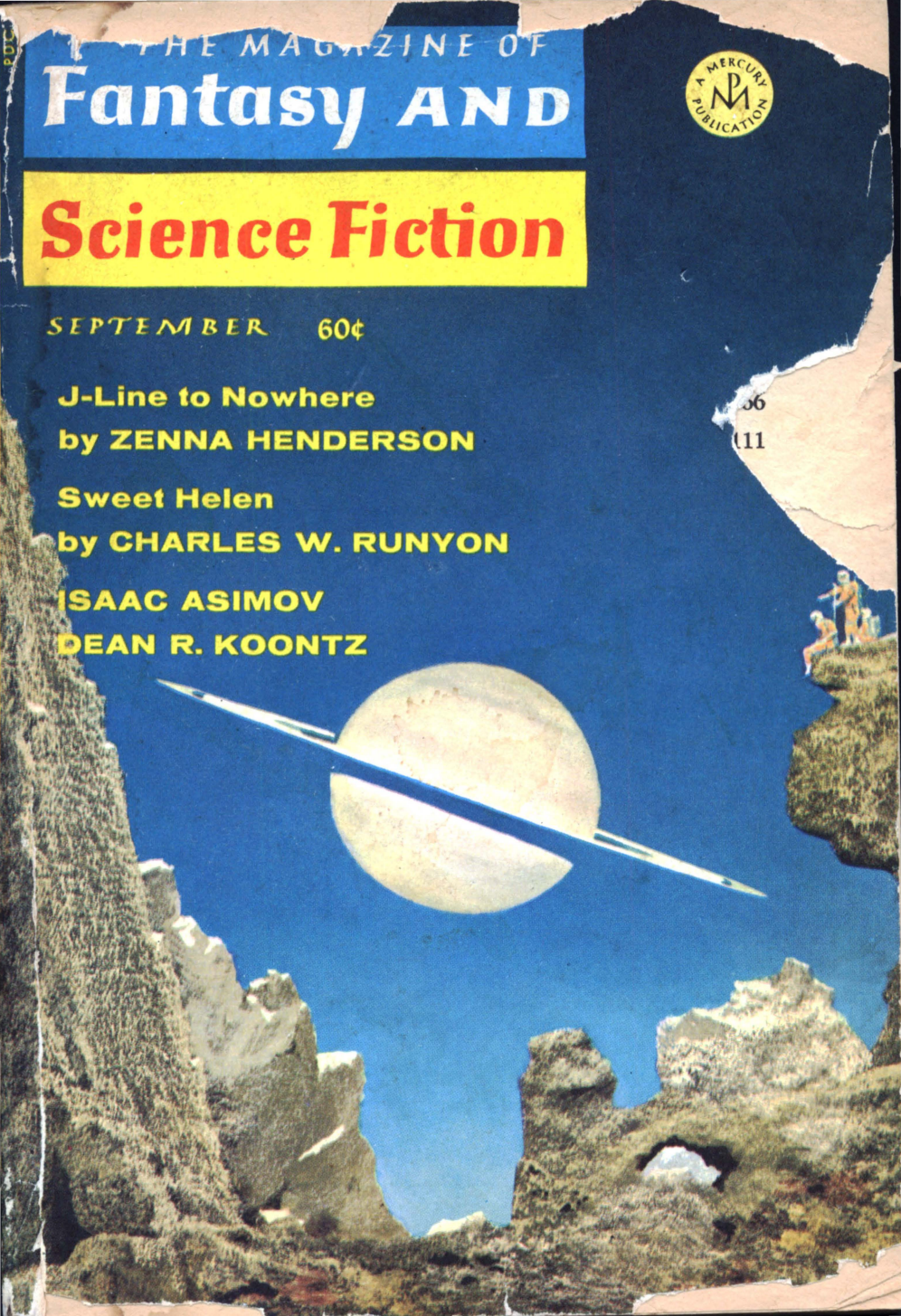

Fantasy and Science Fiction

SEPTEMBER

Cover by Chesley Bonestell (see page 65)

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Charles Runyon has published several crime novels; his latest book is HANG UP *(Gold Medal), and beyond that we have little information about him. We do know that he has only recently turned to writing SF and that he is very good at it. His first story for us recalls the best of Sturgeon and Farmer in their investigations into alien sexual habits, but Mr. Runyon's gripping narrative of death and disappearance on a distant planet stands very much on its own.*

SWEET HELEN

by Charles W. Runyon

"WHAT HAPPENED, TRADER? Get tired of your contract?"

No answer came from the figure slumped over the control panel. A blaster had transferred the head in small segments to the inner wall of the dome. The stains were all dry; the hand which gripped the blaster had shriveled. Life had ended eight months ago; only the machines ran on, sealing the station, sterilizing the air, beaming the signal to Interstellar Trading Corporation's investigations section on Belem-4.

Carl Bolin leaned over the headless mummy and read the glowing letters on the comm-panel. Z-10. Decoded, it was an urgent request for evacuation. A touch of the SEND button would have blurted the plea to ITC's message center on Sol-5, but the trader hadn't sent it.

Bolin pried the blaster from the dried fingers and read the imprint. D. E. Danko. All portable weapons were keyed to the owner's pore pattern. Only one charge had been fired, and only Danko could have fired it.

A sad, familiar story of loneliness, despair . . . and death. Bolin yawned and walked into the warehouse section, feeling awkward and stiff after his eight-month trip in the sleep-capsule. One glance and he crossed out

failure as the cause of Danko's suicide. The wealth of Eutria was stacked, tied and labeled for shipment: bales of snow-white merino fleece, stacks of rainbow-hued Carey pelts—and Kaffrey skins, two of which could pay Bolin's salary for a year. They'd been tied in bundles of one hundred each and ranked like cordwood along one curving wall. Bolin loosened one of the mouse-sized pelts and held it to his cheek. Warmth flowed through his skull. He felt his lips spread in a foolish, happy grin.

He thrust away the intoxicating skin. "Enough of that. There's work to do, eh?"

Bolin stripped the trader's corpse of personal effects, carried it outside the dome, and set his weapon on slow burn. While the cadaver shriveled, he opened his ITC handbook and intoned the Terminal Service:

". . . from Undifferentiated Matter ariseth, to undifferentiated matter returneth . . ."

When only a fine dust remained, he swept it into a plastic bag and packed it with Danko's personal effects in a regulation Survivor's Carton. He would send it off with the next droneship, space permitting. Someday it might reach Danko's next-of-kin—if he had any.

Bolin spent the next two hours taking inventory. There weren't enough furs to fill a droneship, but a quick calculation told him the cargo would run to more than a million Galactic Monetary Units.

Bolin went to the control panel and tapped out the code: A-1. It was a measure of ITC's standard of values that the cryptogram meant there was a precious cargo awaiting shipment. Bolin punched the SEND button—and a red warning flashed on the screen:

Power recharge requires one week. Recheck message and confirm.

The warning blinked off, and Bolin felt a sudden loneliness. In thirty-three assignments, he'd never been this far out. One message a week—blast! The furs would keep.

He stabbed the button marked CANCEL.

"That's why Danko blew, eh?"

He opened the panel and checked the readback. Danko's last completed message was a call for a droneship, dated over eight months ago. Bolin tugged his earlobe. Droneships were computer-dispatched from Sol-5. Traveling in hyperspace, they made the trip in twenty-two hours, no matter how distant the destination.

"Okay," said Bolin. "He called a ship and it undoubtedly got here. They can't load themselves, so they're programed to set for thirty hours and then fly home. Danko died—" He recalled the date his section had received the signal, "—two days after sending for the

ship, so it must have been here when he blew his head off."

Bolin climbed the spiral stairway to the observation bubble. His burnt-out sleep-capsule stood outside on the landing pad, useless as a tin can, fuel gone, nutrients drained. Too bad they couldn't store extra capsules in the stations, but the life-suspension chemicals went unstable after a few days . . .

Beyond the clearing loomed the jungle: eighty-foot asparagus with purple blooms, shrubbery clumps resembling blue cauliflower, and a crimson ground lichen that grew in blotches, as though the earth were bleeding from mortal wounds. To the west a red sun sank into a pea-green sea, tinting the sky the color of a new bruise.

"Looks normal enough," said Bolin. "But something kept Danko from loading the ship. Something made him call for evacuation. And something—when he realized he'd have to wait six days for a sleep capsule—made him jump at the quick exit."

Bolin went outside and circled the dome. The duro-plast base was unmarked, the purple soil undisturbed. The interior was also intact. Nothing could have come in or gone out, since the station had sealed itself the instant Danko's heart stopped beating.

Bolin paused in the bunkroom, noting that someone had sketched a calendar and X'd off the days. In a different handwriting, someone had penned a bawdy poem about the girls of Isilia. A montage of nude females revealed still a different *genre* . . .

All of which reminded Bolin that three others had manned the station during the company's eight-year franchise. All, according to records, had deserted. Danko had been the first to die on duty, therefore he'd been the first to come under the scrutiny of Bolin's section.

Desertion—punishable by loss of rank, seniority and status—and permanent assignment to the labor pool. A slow form of suicide. Since the company controlled all transportation within its trade area, deserters usually took refuge among the natives . . .

Bolin opened the library cabinet, threaded a tape into the reader, swallowed a narco-hyp capsule, and lay down on the bunk. He awoke a half-hour later with a two-thousand-word Eutrian vocabulary etched in his mind.

He opened a case stamped TRADE GOODS and took out two thumb-sized vials of yellow-brown liquid. Each was marked with its trade equivalent:

3 Careys
6 merinos
1 Kaffrey

Bolin pocketed the vials, checked his blaster, and filled the reserve ammo-slots in his belt.

The Eutrian night had fallen when he drove the floater outside

the dome. A single moon hung overhead like a platter of molten gold. Auroras flared from both poles, filling the sky with shimmering yellow, cobalt and red. Bolin slid back the cockpit cover and rose into the lilac-scented air.

At five thousand feet his infrared scanner picked up a large heat-glow on the seashore. Bolin tuned in the viewer and saw several hundred thatched huts spreading inland from a mountainous stone ziggurat. Atop the pyramid squatted a statue of a monstrously fat, wart-covered female. Bolin estimated her height at 100 feet—and she was as broad as she was tall. He could have flown the floater up one of her nostrils.

A crowd was gathered at the near side of the pyramid, some sitting on the ground, others walking idly about. Most of them faced an empty platform at the base of the pyramid. Bolin screwed up the magnification and focused on a figure leaning against a lobed tree trunk. His shape was humanoid, but his slaty skin had a reptilian sheen. Folds of loose skin hung under his throat. A yellow crest, like a cockscomb, rose from the center of his forehead and ran halfway down his back. Though Bolin called him male, he saw no sign of sex on the sleek, naked torso.

He landed silently a hundred yards behind the crowd. Heads turned as he stepped from the floater and walked forward, clasping his hands above his head in the Eutrian sign of peace. Nobody responded, for at that moment a muffled thunderclap sent purple smoke billowing up from the platform. A figure rose slowly through the mist.

She—this time Bolin had no doubt—had skin of blue and green which glittered like sequins. A brilliant orange crest covered her head and fell in glowing folds down her back. Her breasts—even the arrogant courtesans of the pleasure planets would have envied their proud lift and firm tremor as she stepped from the swirling vapor and revealed the inmost secret of her charms to the multitude—

But she had nothing to reveal. From the waist down she was made like the dull creatures around him. Shapelier, yes, and more colorful, but . . .

Bolin, who hadn't realized he'd been holding his breath, released it in a long sigh. Her voice flowed into his ears like oil bubbling from a bottle:

"I am Illynolalamuna,
Bearer of your life-line."

The males around him croaked a chorus, the airsacs under their chins swelling out like balloons.

"Hail the great mother, Illynolalamuna."

Then the female:

"Now the eye of Kakanunu

Falls into Nasumi's fingers
And you must go into the snow country."

The males croaked: *"It is for you, Illynolalamuna."*

And the female:

"Eight seasons from now some of you will return,
The strongest of the strong,
The bravest of the brave.
From you I will choose my mate."

And the males chorused:

"We will bring you love-offering, Kaffrey-skin, Illynolalamuna, Illynolalamuna, Illynolalamuna."

Bolin had moved forward during the chant. He was only twenty feet from the platform when she started dancing. The liquid flow of her limbs melted his eyes; she unraveled his being like a cloth and wove it into her movements. He was vaguely aware that the males around him had fallen onto their bellies and were dragging themselves toward the pyramid.

She lifted her hands. The purple cloud exploded at her feet and hid her figure. When the wisps blew away, she was gone.

Bolin saw the males forming a line before an archway at one corner of the pyramid. Each one carried something: fruit, animals, shell ornaments, carvings. Bolin walked up to the one who stood nearest the opening. The top of his crest barely reached Bolin's shoulders. The animal he carried could have been called a bird had it not been for its fangs and ten-inch eye-stalks. Bolin bowed and gave the formal male-to-male greeting:

"May the great mother extend your life-line."

The other gazed through slit-pupiled eyes and croaked: "May you return laden from the hunt."

Bolin coughed. "You mind if I go first? I've got to get back to work."

The male inclined his head and stepped back. Bolin strode through the archway and found his way blocked by a female. She was taller than Bolin, and obviously older than the one who'd danced. Her skin had lost its glitter, and her drooping orange crest was mottled.

"You cannot see Illynolalamuna without an offering."

The scene was taking on a familiar pattern. Bolin dropped a vial of trade goods into the outstretched hand, and the woman led him down an inclined tunnel. They emerged in a vaulted chamber nearly filled by a thirty-foot copy of the monstrous statue atop the pyramid. She pointed to an opening at the base of the figure.

"Enter. She is waiting."

Bolin felt strange as he walked between the stone knees. It was the logical place for an opening, and certainly the Eutrians had no cause to be prudish about that

part of the female anatomy, but still . . .

He parted the curtain and stepped into a round chamber lined with merino fur—a white infinity broken only by the coruscating splendor of the figure reclining on a dais. Bolin felt a nameless, aching desire, then saw the blank impossibility of fulfilling it. He bowed and began the long male-to-female greeting ritual: *"Unucoma nurinuri somata —"*

She waved her hand. "Please sit. I know your tongue."

He started to lower himself to the dais, then remembered the second vial. He took it from his pocket and held it out. Her fingers touched his as she took it, and he was surprised to find her skin warm and soft as velvet.

"What do you use it for?" he asked.

"When we grow big with little ones," she made stroking motions over her midsection, "it takes away the pain."

Bolin stared at her stomach. It looked bizarre without a navel or . . . anything. Apparently her skin stretched during pregnancy, but how did she get that way, and how did she give birth?

With a reluctant effort, Bolin recalled his purpose. Lowering himself to the edge of the dais, he asked, "Did you know the others?"

"They knew *me*." A silver membrane covered her eyes for an instant. She poured a cup full of pale yellow liquid and set it beside him. "Our men bring gifts so I will bless their hunt. Your men brought gifts so I would help their trade. Men are all the same." She lounged back on the furs, revealing the pink crescents of gill slits below her armpits. "You are called—?"

"Bolin. And you're Illynolalamuna."

Again the silver membrane flickered. Bolin decided it was the Eutrian sign of amusement.

"All females are Illynolalamuna. It means woman."

"You don't have personal names?"

"It is not our custom. But you may call me Helen."

Helen. A lovely name for a lovely person. He wanted to stay in her chamber forever, bringing her food and basking in the purple warmth of her eyes . . .

He kicked his brain into action. "Which of the traders called you Helen?"

"Of the yellow crest and blue eyes. Bergson."

"What happened to him?"

"He was *trauch* . . . how do you say, married."

"Married? To a Eutrian woman?"

She . . . smiled. "We are the only women here."

"I want to see him."

She threw her head back, the silver membranes fluttering. His

demand had brought on the Eutrian equivalent of a belly laugh. After a minute she wiped her eyes. "It is not possible to see the male until twelve seasons after *trauch*. He goes to . . . another place."

"Where?"

"I cannot tell you. It is *cowoona* —tabu."

"You're in charge here—"

"The great mother rules. I only serve. Let us forget Bergson. You like the tea?"

Bolin knew the futility of trying to crack a primitive tabu by frontal assault. He sipped from the cup. Underlying a tart flavor was the oily taste of fish. "Good—but about the traders. Did you know the first one?"

"Aiee. Winslow. We thought him a god, but we learned. One day he ran from the station and climbed a tree. We thought he wanted to amuse us when he tied the rope around his neck and jumped. We did not know then that your people breathe only through the nose. We waited a long time, but he did nothing more."

"You didn't threaten him—or anything?"

"We loved him."

Bolin pushed the picture of the hanged trader from his mind. "What happened to the next one?"

"Nbuka . . . he made us laugh. We wanted him to join his life-line to ours, but he longed for his other wives. When the ship came to take away the furs, he climbed inside and we never saw him again."

Bolin shuddered inwardly. Once he'd seen a stowaway brought off a droneship—a slobbering, vacant-eyed derelict, his mind scooped out by six successive spacewarps. Nbuka must have known what would happen.

"And Danko. The last one?"

She closed her eyes. "The thing he did was *cowoona*."

"Do you know why he did it?"

"He was afraid."

"Yes but—something must have threatened him."

"Nothing here could harm him. It was . . ." She pointed to her head. "His imagination."

Possibly, thought Bolin. But the man who'd stacked and labeled those furs had been far from climbing the walls. And the first trader hadn't hanged himself for laughs, no more than Nbuka had boarded a droneship out of longing for his wives. But . . . Bergson. Somewhere on the planet, among three million frog-people, walked a man with blond hair and blue eyes.

Bolin put down his tea, said goodbye, and left.

Bolin hovered ten thousand feet above the temple and wondered why he felt reluctant to see Helen again. For a week he'd searched

the islands of the equatorial sea—a sea so thick with algae that gale-force winds stirred only an oily smell. He'd found only villages smaller than the one below. Some natives recalled seeing the blond, blue-eyed trader in seasons past, but if anybody knew where he was now, they weren't telling. He'd spoken mostly to the women, who had welcomed him with tea and seemed ready to give more—but none were as beautiful as Helen, and none had mastered his language. The men were a subdued, subject race, though they outnumbered the women ten to one. Silently they worked the fields, gathered food—and hunted furs.

Looking out the port, he saw the bluish tint on the horizon which marked the beginning of the ice-fields. He recalled the male he'd found there, his frozen skin peeling away in white tatters, his ribs showing through. Bolin had revived him and offered to take him home, but the little Eutrian had refused, having no skins to offer the women.

"I'll give you some skins."

"It is *cowoona* to take skins from another. But you have made me strong, and now I can take enough to be chosen."

"What if you aren't?"

"I will hunt again."

"Suppose you get too old to hunt?"

"I go to the Isle of Death, Magrumando."

Bolin gave him a packet of rations (weapons were also *cowoona*), let him out in the snow, and flew in search of Magrumando. He landed on a beach of purple sand bordered by trees heavy with fruit. Flowering vines and berry bushes covered the slopes.

He found an old man sitting under a tree. His skin hung in scaly folds, he had no teeth, and one eye-socket was empty. He told Bolin he'd been there four seasons, eating, sleeping, and waiting for the earth to claim his body.

Bolin squatted beside him. "So you failed to get chosen."

The old man's good eye blazed. "That is not true. Four good hunts I made. Four times I was chosen."

"Where did you go afterwards?"

"Into the sea."

Ah . . . but Eutrians had gills, and Bergson didn't. He couldn't live in that ocean of cold pea soup.

"You came up after twelve seasons. What then?"

"We serve the women. When our time comes, we hunt again. If our line is chosen, we *trauch* again."

"And go into the sea again and come out again, and hunt again. Is it worth it?"

"Worth what?"

Bolin had left without learning more. One reason sexual research was so frustrating was that no-

body could give any reason for what they did. It was merely done, instinctively, to perpetuate the race. But how had Bergson gotten involved? He couldn't have had an instinct to perpetuate a race of frog-people . . .

Helen would know. Bolin landed the floater beside the temple and got out. The old woman was directing a group of young males harvesting an eggplant-like fruit. She told Bolin that Helen was feeding her little ones—and for a vial of trade goods she led him to a house of green jade built on the beach. She slapped the water several times with her hands and then walked away.

A minute later Helen rose from the water, an iridescent Venus who waded ashore squeezing the water from her crest. She was half a head taller than Bolin, but she moved with the willowy grace of a slender girl.

"Bolin. Come into my house."

The room had no furniture—only a fortune in pelts scattered about. Bolin felt wonderfully relaxed and happy. He knew it was the Kaffrey skins, but he saw no harm in enjoying the feeling as long as he remained alert. He watched Helen prepare tea and noted that her thighs were heavier, her lips fuller, her breasts swollen to magnificent proportions. He must have stared, for she said:

"Our time draws near; soon the men will return from the hunt, you will trade for furs, and we will choose our mates from those who bring us love-offerings."

Feeling indecently crafty, Bolin asked, "What did Bergson give you as a love-offering?"

Without change of expression she set the tea beside him. "Drink. I will get it."

She left the room and returned with a black book titled *Doctor Faustus.* Sitting beside him, she opened it to a well-thumbed page. "This is where I found my name. I also learned that your people made love as we do."

Bolin read the lines:

Was this the face that launched a thousand ships,

And burnt the topless towers of Ilium?

. Sweet Helen, make me immortal with a kiss—

He looked at her. "You kiss?"

"Aiee."

Her limpid gaze made his scalp prickle. "You've been feeding your little ones. Is one of them Bergson's?"

"How can a male have little ones?"

"I mean—" He searched his memory and found no Eutrian word for "baby." He tried the phrase *Alivunewa-Bergson,* which meant, Little-ones-from-the-life-line-of-Bergson.

She smiled when he said it. "Yes. Would you like to see?"

He waited on the beach as she

waded out. "Look quickly, the little ones cannot yet breathe the air."

She disappeared into the soupy sea. In a few minutes she reappeared, struggling to raise something to the surface. Bolin gasped as the head broke water. Terran and Eutrian had blended into a strange hybrid. Instead of flesh, the yellow crest was composed of silky hair. Membranes covered the nostrils of a childish snub nose. The slitted eyes were blue, and for a moment they met Bolin's with a look of unmistakable intelligence. Then the creature wriggled and slipped into the water. It had neither arms nor legs, just a long slimy tail.

"He must stay in the sea four more seasons," she said as she waded ashore. "Then he grows arms and legs and walks on land."

He frowned at her. "I still don't see how you and Bergson—" A flush climbed his neck. "Let me get it straight. That . . . little one is a result of the marriage of you and Bergson. Right? So how was it made?"

"It is not a thing you can understand, with this." She pointed to her head. "You must have the *experience.*"

He looked into her steady, violet eyes and knew she wanted to grant him the experience. It seemed to promise ecstasy beyond his comprehension—but he had a feeling he might not survive it.

He returned to the station, where he discovered that the trading season had opened on the far side of the planet. Trading season meant mating season, and an excellent chance to solve the maddening riddle of HOW? He loaded his trade goods in the cargo sled, pulled a stratosphere suit of impervious fabric over his blue uniform, and hung an extra charge belt around his waist.

Three hundred fur-laden Eutrians moved back as he landed the floater with the sausage-shaped trailer. By the time he'd set out his table and trade goods, they'd coalesced into twenty separate groups, each containing one female.

Bolin held up his hand, and the males shuffled forward one by one and laid down their furs. Many had lost fingers, arms and legs; all were hollow-eyed and gaunt. The females had grown fat and listless since his last visit. It was only a seasonal change, Bolin decided—still it was a strange way to attract males. Bolin felt only revulsion toward the obese creatures who gathered up the vials and waddled off into the bush, each followed by her retinue of suitors.

The last female was the worst. Her legs were giant sausages pinched at the knees and ankles; her breasts were enormous bags of tissue which rolled and trembled as she lurched forward to

gather up her vials. Her eyes were like plums pressed deep into a doughy face. They followed him as he folded his table and stowed it in the cargo sled. When he moved toward the floater, she planted herself in his path.

Bolin groaned inwardly. He hated to use his weapon on the poor old walrus, even at low power. "You have many lovers," he said.

She regarded her bedraggled following with contempt. "I am strong. They wish to *trauch* with me and make themselves stronger. But only the best can be chosen."

"How do you decide who's best?"

"Those who have the most furs are best." Her eyes strayed to the loaded trailer.

"Those aren't mine," Bolin said quickly. "I gather them for another."

Her fat lips drew into a pout. "You are already chosen?"

"Aiee."

She turned and went away, trailed by thirty males. Bolin locked the floater and followed their path to the seashore. From the shelter of a bush he watched the female wade into the ankle-deep water and stand motionless while the males pranced around her chanting, *"Awkanawlandia."* Each tried to outdo the other in leaping and twirling. After an hour nearly half the males lay panting on the sand. Then the female lifted her arm and leveled a fat finger at one of the survivors. He walked toward her on legs as stiff as frozen asparagus.

"Awana - naskamandupar," chanted the males, locking arms and encircling the pair. The female bent and touched her lips to the male. He leaped into the air and came down running. He tried to break out of the circle, but his fellows threw him back. He fell down and lay jerking and twitching until at last he moaned and lay still.

Bolin watched the features take on the shiny transparency of mucus. The chosen one's nose was melting into his face, his ears were drooping, his chin collapsing. The female crouched at his head and opened her mouth. Elastic jaws spread out and encompassed the skull, the shoulders . . .

Bolin turned away, his stomach churning. *Poor Bergson.*

When the slurping sounds ended, Bolin looked back. The female lay in the shallow surf like a sow in a wallow. The males stood around her, smearing the contents of the vials on her taut, distended flesh. Then they waded ashore and melted into the jungle like sleepwalkers.

Bolin waded into the knee-deep water and looked down. Her blubbery mass exuded a musky scent which stung his nostrils. She made grunting sounds deep in her throat, and Bolin knew the ec-

static guilt of the voyeur who watches something obscenely personal and private.

A wave washed over her body. A goiter-like lump appeared on her neck and swelled into a protuberance as large as her head. Damnation! It *was* a head. He could see the blurred outlines of the nose, the eyes, and the slitted mouth. The tissue which connected it to her neck grew longer and thinner. A wave swept in and carried her body away. He caught one last glimpse of her as she turned in the surf, limp as a dead dugong. The lump was gone from her neck, but more swellings grew on her back and shoulders.

When he returned to the station, Helen was waiting with twenty males. Her beauty had reached perfection, like a cup filled to the brim. Another drop would cause it to spill over into excess—and she would be another fat, sloppy sow.

He opened the canopy and wrinkled his nose at the musky scent which flowed from her body. "What is it?"

"I brought men to help with the furs."

"I don't need help. Take them back to the village."

She led her crew to the edge of the clearing, then started to return alone. Bolin jumped from the floater and walked quickly to the dome. He held his identity ring against a glowing black spot and watched the iris expand into a six-foot opening. He stepped inside, closed the port, and breathed a deep sigh. The domes were secure against anything short of a direct nuclear hit. He went to the sender and punched out the call for a droneship. Then he added a second cryptogram: *Z-10 Send sleep-capsule for emergency evacuation.*

As he reached for the SEND button, his nose caught the scent of musk. He whirled and saw Helen standing in the open entrance.

"How'd you get in?"

She held out an identity ring. Bolin walked forward and took it from her hand, then stepped back in haste. Her body scent made him dizzy. He glanced at the ring and saw that it was Bergson's. He didn't like to think about how she'd gotten it.

"Helen, go back to your village. The men are coming in from the hunt. You'll have to make your choice."

"I have chosen."

Reluctantly, Bolin drew his sidearm. "You know what this can do?"

"I have seen it break rocks, burn trees."

"I'll burn you if you don't get out."

"Why will you do this? I love you."

"You loved the others too. Now they're dead."

"Only those I did not *trauch.*"

"And that one doesn't exist any more. Maybe you don't think that's important, but where I came from it means you're dead."

She didn't move. Bolin set the weapon and fired a cone of low heat in front of her. "Leave, Helen, or I'll blast you to pieces. Can't you understand that?"

She stood impassive. Bolin screwed up the heat level until he could see the grass shrivel on the ground behind her. Finally she stepped back. Bolin lunged forward and hit the switch that closed the aperture. He went to the infra-red scanner and tracked the red glow of her body heat as she walked to the edge of the clearing. There she remained. There was something pathetic about her, but the memory of Winslow, Nbuka, Bergson and Danko drove all pity from his mind. She'd probably waited for them too.

He returned to the control panel and punched the SEND button. He waited until the warning had flashed, then pressed CONFIRM. Instead of clearing, the panel blinked another warning:

Filing of false request for emergency removal will result in immediate summary dismissal. Traders will be evacuated only if in danger of serious injury or loss of life due to mechanical failure, natural disaster, hostile human force, hostile indigenous life-form, or disease.

Was Helen hostile? She loved traders—just like some people loved apples. Still he hesitated. *You don't have all the answers, Bolin. What about the old boy who was trauched four times, eh?*

He punched the CLEAR button and checked the scanner. Helen still lurked at the edge of the jungle. He ran out of the station, unhooked the trailer, and jumped into the floater. As he soared upward, he saw Helen lumbering across the clearing on fat, shapeless legs. She'd spilled over the edge . . .

Bolin flew to the village and hovered until he found the house of green jade. Sealing the cockpit, he lowered the ship into the shallow sea. His spotlight beam penetrated less than six feet into the murk. Curious Eutrian faces appeared in the glow, wriggling their tadpole tails behind them.

After several minutes he saw a head with blond hair and blue eyes. He opened his pad and wrote: *If you read this, wriggle your tail.* He held it to the port. The tail wriggled.

Bolin wrote again. *Are you Bergson's child? Wiggle once for yes, twice for no.*

The tail wagged twice.

Then you are Bergson?

Yes.

Bolin wrote: *I can order a sleep-capsule to take you to Merovna. The ant-surgeons can give you a normal body. Interested?*

The answer was no. Bolin was puzzled. He wrote: *Are you happy here? You chose this life?*

The answer was negative. Bolin was trying to rephrase the question when he saw another head with blond hair and blue eyes. A moment later there were three . . . five . . . ten . . . twenty.

You are all Bergson?

Twenty tails wagged in unison.

As Bolin flew back to the station, he pondered Bergson's future. In two more years he . . . *they* would come from the sea, fully formed. Then, suppose he got his hands on a sleep-capsule? Would he be willing to leave the other 19/20ths of himself—?

Bolin gave up. He couldn't get his mind around the concept of twenty selves. One was complicated enough—*Damnation, yes, and there's Helen squatting in front of the port like a giant purple frog.*

He activated the floater's armament and bathed her in a cone of intense heat. *Sorry, dear sweet Helen, this hurts me worse than it does you.* She slouched away from the dome, her huge thighs quivering. Bolin jumped out, opened the aperture, and dashed inside. Going to the console, he tapped out the message, A-1, Z-10.

He had twenty-two hours to wait. He opened his pad and started writing a report to send with the droneship, since it would arrive eight months before he did. . . . Females reproduce twice a year, bringing forth litters of about twenty males. Since food supply is stable, excess males are disposed of in a hunt in which all but the hardiest die of cold and starvation. The female then chooses the strongest of these and through mouth contact injects venom which initiates the digestive process by breaking down the cell structure. She then eats the male and goes into a coma. Contact with sea water stimulates the growth of buds which eventually detach themselves from her body. The offspring are identical in appearance to that of the ingested male. They also possess his memory and acquired abilities. Putting it simply, the male becomes twenty copies of himself.

Selection of mates has become associated with possession of furs. Thus any trader who acquires furs becomes a prime target for selection. This would be mere annoyance were it not for the extreme—

A movement at the side viewport caught his eye. He saw a grotesque, doughy face, centered by two large purple eyes, bulging and watery, like eggplant frying in deep fat. A fat forefinger traced letters on the glass:

He ran to the port and hit the opacity switch, turning the port into a milky ovoid. Beads of moisture had formed on the inner surface. Bolin touched his finger to the droplets and felt a warm mucosity. Wrinkling his nose, he wiped his finger on his trousers and returned to his report.

—were it not for the extreme aggression of the females at breeding time. The unsettling effects of this drove Winslow, Nbuka and Danko to suicide, and weakened Bergson's resolve to the point where he finally succumbed.

The problem can be solved by sending only female traders to Eutria. Such is my recommendation.

Carl Bolin, Special Agent, E-12

Bolin put down his pen and massaged his numb fingers. They felt like dirt-filled gloves. He realized that these same fingers had touched the mucus on the glass. *Some sort of anesthetizing substance . . .*

He went to the medicine chest and poured antiseptic over his fingers. It seemed only to spread the numbness into his hand. He pressed his forefinger into his palm and the imprint remained. He seized his fingers and watched with idiotic horror as they bent backward like hot wax candles.

The worst part of it was that he felt neither pain nor coldness—just the insidious, creeping death of his flesh. Dazed, he walked out of the washroom and the heady scent of musk assailed his nostrils. *She's inside.* He stared up at the observation dome and saw beads of moisture dripping off the inside of the blister. A pile of the stuff had congealed at the foot of the staircase. He watched it thrust up a pseudopod of milky slime which thickened as it grew. He reached for his blaster, but his right hand hung like a wet glove. He made a cross-draw with his left hand and fumbled with the power setting.

By now he could discern the warped caricature of a head. Two tentacles shaped themselves into arms; two pillars formed beneath the trunk and raised off the floor. Slowly the mass drew itself into a Eutrian female recognizable as Helen by the blazing orange crest and purple eyes and the scent of musk which swirled in his head like intoxicating liquor . . .

He thumbed the blaster to full destruct and pulled the trigger. Lightning flashed inside the dome; the stairway dissolved into molten steel and plastic. When the smoke cleared, the floor was covered with pulsating worms. He watched two flow together and form a blob. Two blobs melted into a larger one; then all the blobs began to flow into a single puddle.

He fumbled in a fresh charge and fired again. This time he trained the heat ray on one of the

blobs. It sizzled and popped like frying fat. He held the ray steady until only a greasy spot remained —and by then the blob had reformed and was rearing up to a six-foot height. *Some kind of learning process involved,* he thought as he fumbled in a fresh charge. Death had invaded his shoulder; his right arm hung like a jellyfish, stretched by its own weight until his fingers touched the floor. He gripped it just below the elbow and pinched off the useless flesh like a twist of taffy. He wiped the sticky substance on his trousers and felt a dull weight of despair. All feeling had gone from his left hand.

He fired again, but this time only a hole was torn in the mass of tissue. He could see the wall through her body, but even as he watched, the hole closed up; and from an enormous pink-rimmed mouth rolled the word:

"Booooo . . . liinnnnnnnn."

He turned to run, but his right leg had melted down the outside of his boot and stuck to the floor. He sprawled face down and sensed her huge shape hovering over him. He knew there was an old Chinese proverb which covered the situation, but he couldn't think of it now. He'd have time to remember during his six years in the pea-green sea.

The touch of her lips was a balm which soothed his tortured nerves. He felt pleasure so intense that his body writhed and twisted, a gratitude so profound that he wanted to scream.

Sweet Helen, make me immortal with a kiss.
Your lips suck forth my soul.
See where it flies . . .

BOOKS

OF THE MAKING OF MANY books there is no end. And they are all published, too. And the people cried out, saying: Give us a sign, we would have a sign. So Doubleday gave them a sign.

Virtual immortality, space travel, the extension of consciousness, artificial intelligence—topics like these have been explored in science fiction for years. THE PROMETHEUS PROJECT: MANKIND'S SEARCH FOR LONG-RANGE GOALS by Gerald Feinberg (Doubleday, $4.95) adds nothing to the exploration but an appalling naiveté. PROMETHEUS is a stupid book, stupid beyond description, shallow beyond bearing, and as devoid of subtlety as it is of logic. To say that Dr. Feinberg is not equal to his subject is nothing; none of us is equal to the question of whether mankind ought to have conscious, long-range goals and what these ought to be, but some of us at least are troubled by the doubts that intelligence brings. Some of us at least have an inkling of the difficulties involved, let alone the agonizing choices one would have to make, let alone the problems of even defining the subject. PROMETHEUS is sillier than the worst Flying Saucer scare book; it is written on the village-atheist level and riddled with inconsistencies; and Dr. Feinberg's attempt to keep moral considerations out of his discussion only exposes him to the oldest and most vicious ethical fallacies. For example (p. 166):

> ". . . modifications . . . may involve . . . psychological conditioning of future generations . . . Yet to be raised in any society is to be conditioned into certain beliefs and forms of behavior. In most cases the conditioning is done unconsciously, and the beliefs are tacit. I do not think that any new moral principle is established if we do the conditioning consciously . . . It is a question of what the principles that are instilled . . . are to be, and it would seem that the freely chosen goals of the human race are worthy candidates."

In other words, if what is done *inadvertently,* or *out of necessity* (as much social conditioning is), or *to the smallest possible degree* is morally right, then what is done

knowingly, gratuitously, and *as completely as possible* is also morally right. And the end justifies the means. A few more gems:

On p. 69, intelligence is defined as the ability to answer questions, a definition that would fit any automatic telephone switchboard; by p. 77, intelligence has somehow become synonymous with consciousness. On p. 107, "there is no external standard for ethical statements" while on p. 126, "We should not . . . feel any qualms about introducing ethical principles for determining human actions *other* than the arbitrary preferences that people alive at one time have . . ." (italics mine.) On p. 154, Dr. Feinberg defends his own pet goal, the extension of consciousness, by simple assertion: "Consciousness is the most precious thing man possesses." On p. 64, a particular course of action is condemned because it would undo "the slow growth of unity in mankind" while on p. 134, "man is anything we call one." On p. 83, the possibility is raised that virtual immortality might make people more afraid of death than they are now, but Dr. Feinberg says he doesn't think so. No evidence is given. On p. 161, the book considers whether we know enough about "our own mental lives, the sources of our motivations, and the conditions that would lead to happiness" to formulate long-range goals for the entire human race, and comes to the staggering conclusion that "these problems are less important if we are trying to make statements about groups of men because the individual factors tend to average out." Anyway, "In any situation, human beings must plan and act on the basis of the best information they have." (The Feinberg version of *Why not put beans up your nose?*) In Chapter VI we leave reality altogether; there is going to be a world-wide publicity campaign, discussion groups, and finally a consensus of the human race as to what its long-range goals should be, a process that will take from twenty to fifty years. There will also be a Prometheus Coordinating Agency, or PCA, about which Dr. Feinberg (he is a Physics Professor at Columbia) fusses for several pages.

ODD JOHN is not a book I approve of, morally speaking, but after reading PROMETHEUS I know what drove Stapledon to write it.

It is a pleasure to get back to science fiction, especially to a book that shows uncommon intelligence, like Kate Wilhelm's LET THE FIRE FALL (Doubleday, $4.95.) The novel is not as good as her best short stories—none of her novels have been—but it has many good qualities, and some

that are rare in science fiction.

For one thing, the novel disregards commonplace pulp form completely, and with no ill effects. For another, it is brimful of the details of ordinary life—too full almost, for the people and places take on a liveliness beyond that necessary to the plot. At times this is confusing, but more often it's delightful—real people, recognizable people whose lives twist and shift, whose motives change, whose most commonplace decisions have unexpected effects. The book is written in a style Henry James once (in another context) called "feminine"; that is, the accents never fall where you expect them to, the "big" events are over in a flash or are revealed obliquely, and the novel always presses on to something else. It's uncommonly like life and often compelling. Kate Wilhelm has begun to experiment with style in a way I like, introducing herself here and there, making lists of things, and generally turning from the straight path of virtue to say things when she wants to and not when she "ought" to. There is the odd matter-of-factness of real life, and the book is a real novel, a considerable achievement in a field in which the adjustment of story to detachable ideas is a perennial problem. And it's a pleasure to read a novel in which childbirth and family life are described by someone who knows about them.

However, the book's virtues often kept me reading when I had intellectual objections. For example, the characters in the book change their minds quite a lot, sometimes very confusingly, especially the young evangelist whose career provides the motive power for the plot. I could not always follow what was going on, but the characters could, and I found myself believing in them willy-nilly. Also, the book—although set some ten years in the future—seems to me to occur quite definitely ten or fifteen years in the past, although this may only mean I'm a provincial New Yorker not acquainted with the "normal," decent-American, small town people Kate Wilhelm is writing about. The novel employs that conflict of science with a fundamentalist and revivalist religion so dear to the hearts of science-fiction writers: the book traces the career of a sort of Billy Graham (Obie Cox) and the kind of social changes caused by his Voice of God Church. It seems to me that this theme, a beloved paranoia of ours, is not credible, that the great twentieth-century wars of religion have been wars of political ideology, and that any catastrophic repressions likely to occur in the future will be political in name and nature and not in any way identifiably religious (except for their intolerance). Scientism is

our besetting vice, and without some great disaster (like atomic war) we are unlikely to persecute science, or even decently restrain it. The book reviewed just before this one is a case in point.

That croggle aside (and a few pieces of dead wood, like a riot on page 120ff that I haven't yet straightened out) FIRE is a believable and exciting book. Here is one of the main characters:

> "Dee Dee sang in the choir and bought the Pill from a college friend. Dee Dee had read all of DeSade, had turned on twice with pot, smoked a pack a day, and could drink three martinis and still drive . . . She sang in a sweet soprano: 'I will follow, follow all the way.' She opened her mouth for the high notes, but didn't try to reach them. Only the choirmaster suspected, and he never had been able to pin down the exact source of the reduced volume when the notes got up there."

The Wilhelm baddies are better than the goodies, and this one has a career worthy of her.

WORLD'S BEST SCIENCE FICTION: 1969 (Ace, 60¢) is an excellent anthology, packed with fine stuff, and with the special virtue of including many good stories originally published outside the science-fiction magazines: Poul Anderson's "Kyrie," Brian Aldiss's "The Worm That Flies," and Terry Carr's "The Dance of the Changer and the Three" from *The Farthest Reaches;* Kurt Vonnegut's "Welcome to the Monkey House" and Damon Knight's "Masks," both from *Playboy;* and three from Britain—Colin Kapp's "The Cloudbuilders," Fritz Leiber's "The Square Root of Brain," and Samuel Delany's "Time Considered as a Helix of Semi-Precious Stones." The last two are not only superb, but eligible for any kind of award, please note (first publication in this country).

Picking favorites here would result in my naming almost everything in the table of contents; a few stories are weak but none are bad and most range from good to —well, you decide. Robert Sheckley has a story about a city that's a Jewish mother; Burt Filer (a newcomer) has a first-rate story about time-travel with a beautiful twist at the end; Fred Saberhagen retells the story of Orpheus and Eurydice with *another* beautiful twist at the end; and Katharine MacLean has a realistic, detailed, impressive story about telepathy.

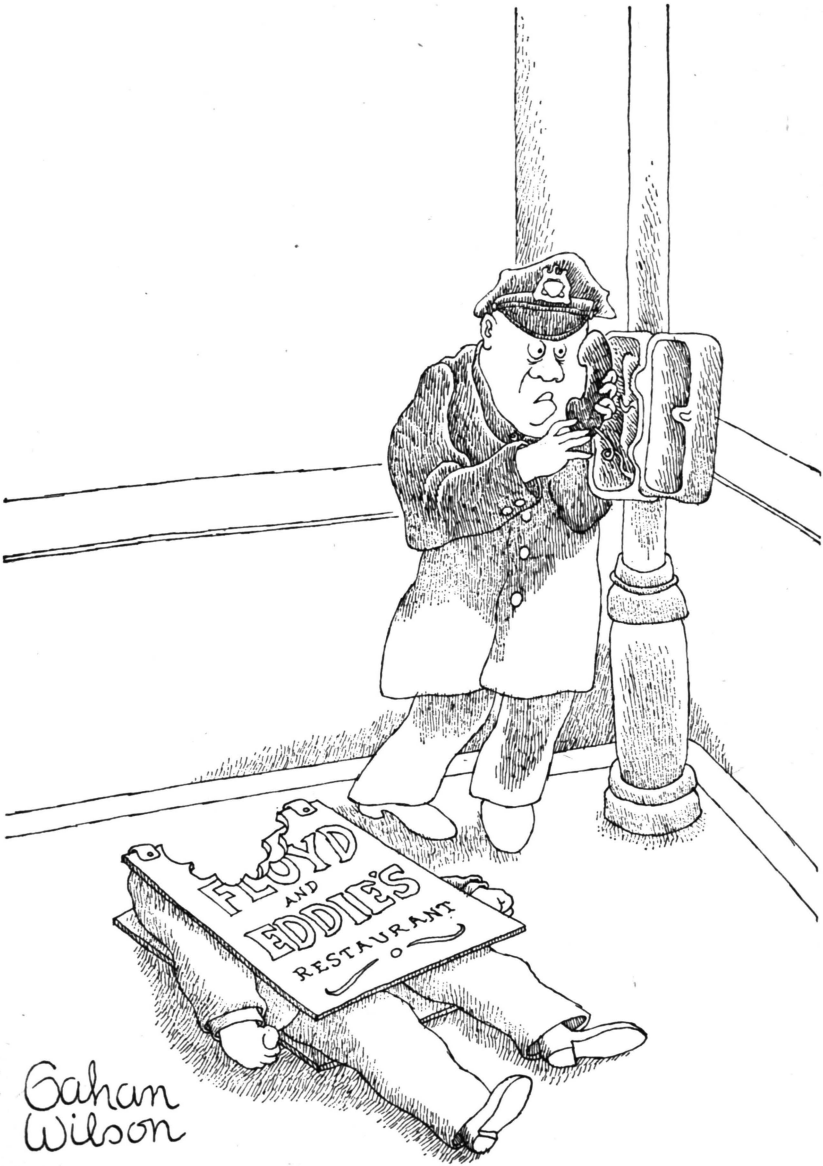
I am convinced—for the duration of this paragraph—that the short-story is the proper form for science fiction, always was, always will be. I particularly liked "Backtracked," "Kyrie," "The Worm That Flies," "Masks," "Time Considered etc.," "The Dance of the Changer and the

Three," and "The Square Root of Brain." Buy it, read it, and find out which ones you like best.

It is not really a crime to write THE LAST STARSHIP FROM EARTH (by John Boyd, Berkley, 75¢) but why *publish* it? Why *re-publish* it? I would guess from much in the book that the author is a very, very young man, and if he wants to go on writing science fiction novels, I for one will not poison his coffee, because the third or fourth try might be readable. But duty is duty, and I hereby publicly state that THE LAST STARSHIP FROM EARTH is incoherent, bumbling, enthusiastic, pretentious, ineffably silly, and—to put it kindly—immature in the extreme. Berkley has no right to foist this amateurishness on the public. It is no favor to Mr. Boyd to expose him to this sort of public shredding and no favor to the public to convince them that science fiction is even worse than they always thought it was. In time Mr. Boyd may learn what a plot is (he thinks he can tie up 175 pages of loose ends in a few paragraphs) and what men, women, and society are like. But he must also learn something about science ("It was several microseconds before the aesthetics of her motion intruded on his consideration of its mathematics"), something about practical observation ("her voice dropped an octave"), and something about style ("it was the first time in his life he had ever heard a female professional not in a house of recreation volunteer so titillating a witticism from behind such a titivating facade.") I forgive Mr. Boyd the anguish his novel caused me and hope he will eventually forgive me the anguish this review may cause him, but for Berkley there is no forgiveness. Only reform. *Don't do it again.*

THE DA VINCI MACHINE by Earl Conrad (Fleet Press, $5.95) is an interesting and promising collection of short stories by a writer new to the field. Subtitled "Tales of the Population Explosion," the book is a gaggle of satirical fantasies in which the science is purposely absurd. Mr. Conrad doesn't seem to have gained full control of the short-story form yet, and although the tales are literate and sometimes funny, his false-naive, "throw-away" manner leads to many stories coming on strong only to fade away after the beginning. The stories suffer from being presented in a collection, as they are all alike and the one manner gets monotonous; the best of these could have appeared to advantage in the science-fiction magazines. The style is Lafferty-and-water, and often good.

—JOANNA RUSS



"The sandwich man killer has struck again!"

It's a pleasure to have Julian Grow and Doctor Hiram Pertwee back with another fast and very funny blend of space flight and thundering hoofbeats (sporse opera?). What happens when an expeditionary force from the Rigel system lands smack in the middle of a confrontation out of a John Ford western is the subject of this yarn, and it is guaranteed to entertain you. Boots and saddles, trumpeter!

BONITA EGG

by Julian F. Grow

THE WAY IT WAS, WAS THAT BIG Tillie took sick.

Maybe you heard of her as The Ministering Angel of Hot Spit Crick, or the Nickel Nightingale. Feller as wrote for dime novels did a string a yarns and called her them things, and made her famous back East, and a impresario come all the way out from St. Louis to see if she'd do for the vaudeville. Sort of like Buffalo What's-his-name, there.

He packed all the way up to the Hot Spit Crick diggings for a look-see and come back a shaken man—said he wouldn't book her into a zoo.

Well, anyways, we all knew her as Big Tillie when she was just one of the girls at Kate's Four Bit Crib, up the backstairs at the Owl Hoot Palace. Then she got into a can of bad peaches. I saved her—name's Pertwee, Doctor Hiram Pertwee, formerly from East Randolph, Vermont, and the only doctor around. Do say so myself, all my customers is satisfied, the ones that ain't being largely dead.

Thing is, while Big Tillie was still light-headed and nothing to do she got religion, and took it into her skull to go up into the mines and bring The Word to the poor sinners there. Damn if she didn't do it, too. Only she come to her natural senses pretty quick and

seen that The Word was "Cash." Been up there years now, ministering her own way, and must be close to owning the mountain.

Oh, she'll spoon gruel into an ailing client if he ain't too sick but what he'll get better by payday, but she's far from a angel. Who ain't? Anyhow, this one day a bunch of hard-rock men from Hot Spit Crick come stomping into my office—upstairs next door to the stage depot, if you should ever be feeling poorly—sober as judges, scarcely drunk at all, and solemn like they'd just seen the first crack in the end of the world.

Hell, I suppose by their lights they near had. Seems Big Tillie'd broke out with a boil on what one of them delicately called her hindquarters, and would I in the name of sweet compassion do something about it? Because all Big Tillie'd do is lie on her belly and bellow blue murder, and it was going on three weeks and wrecking their lives generally.

Goes without saying I had no more mind to ride seventy-five miles straight up, to Hot Spit Crick nor anywheres else, than the man in the moon. So I set out to write them a recipe for a poultice, one that bakes up into a pretty good cookie if it comes to that. But them miners was fair desperate and I sort of got the notion if I didn't go along and treat Big Tillie's indisposition personal, I might come to harm.

My mail-order medical degree don't cover such cases, but common sense does. I shut up shop and set out to ride seventy-five miles straight up, to Hot Spit Crick with the posse.

Now, one of the reasons I didn't much want to ride all that way was that to do it I'd have to ride Poor Harry, my Morgan gelding. Poor Harry don't like to be rode. Fact is, he's pugnacious about being rid. Another damn fine reason is that it's pretty chancy country between here and Hot Spit Crick, what with unreconstructed Indians and other acts of God, and I could well as not never get there, to say nothing of back home again.

Turned out I never did the one, and the other only barely just. What I mean is that for all I know Big Tillie's still on her gut and all the miners off baying like wolves in the hills, since I never did get there.

Sure, I saddled up Poor Harry, him gnawing me once in the process, and I rode out with that band of desperados, righteous with noble intent, and I even got halfway up to the mining camp. But just about then we got marauded at by a bunch of savage redskins, and I never did see them miners again.

What mind Poor Harry's got is purely his own, you understand. Once the catowse begun he lit out, and it was all I could do to hang onto the saddle horn, much

less steer him. We must of charged full-tilt up hill and down dale for upwards of a hour before I could get my right foot out of the stirrup long enough to kick him under the chin, which is the only way to stop him once he's set on travel.

By then it was full dark with the waning moon just commencing to rise over country I sure hadn't never seen before. But after all that pelting along, Poor Harry'd worked up a thirst, so when he snorted his smell-of-water whicker, I give him his head.

We come out of the brush into a little clearing, on a stream rollicking down through the boulders, and waded right in. Over the racket of Poor Harry slurping I thought I heard something out of place, and did, too. Under the regular crick sounds and poor Harry foundering hisself, and all the other night noises, I heard a humming. I tethered the fool animal to a stump and went for to see, since the humming was "The Vacant Chair" by Henry Stevenson Washburn of Worcester, Massachusetts, and it was done in a nice clear contralto.

I was about as stealthy as a rockslide, on the way to that pool upstream, but the humming never stopped. Finally there was the pool, dancing in moonshine, and close into the back was the hummer: jaybird naked, washing, unconcerned as all get out, and pretty as a picture.

Feeling like an eight-year old kid with a cookie jar and nobody else home, I watched from the shadows whilst she finished her bath, strode graceful as a whitetail doe from the water. She swiped herself dry with the edge of her hand, then climbed into her duds, shirtwaist and long skirt and all. Wasn't until she plaited her hair and slipped on a beaded headband that I seen she was a Indian.

Wasn't ready for what it was she said then, neither. In a clear cool voice she said, "What a lot of dirty old men there are nowadays. Will you gentlemen join me in a cup of coffee?"

Well, sir, them other thirty-seven years of mine caught up with me quick. I come out of the shade feeling tolerable foolish, but wondering why she said "gentlemen" when there was only one of me. And then there was a rustling further upstream and another feller come out. He was strapping and tall, but you could scarcely make out his face in the moonlight because he was black as the ace of spades.

That weren't the point just then, for what with being dead guilty, I was morally indignant. "Now see here," I begun, whilst the other feller just looked stern.

She paid no heed whatsoever. Went right on like she was in a parlor someplace and not out in the wild. "Don't think me shameless," she said. "When I heard you

coming from opposite directions, there was no one to scream to and nowhere to hide, so I finished what I was doing. And I'm sure neither of you are dirty old men.

"I invited you to coffee," she remarked, "and the only difficulty is that I don't have any." She smiled bright as a brand-new dime. "Is it possible either of you gentlemen do?"

The black man and me stared at each other blank-eyed. Then I hemmed a bit, and hawed, and said, "Guess maybe I might. In my medical bag, back there on Poor Harry. He's my horse. I'm a doctor." And a damn sheepish one to boot, I might of said but didn't. Being professional ain't no call to peek free at naked young ladies, even red ones.

By the time I led Poor Harry back, the other feller and the Indian girl was getting on peaceable enough. That is, he hadn't et her and she hadn't scalped him. She'd fetched some wood and was laying a fire, redskin style. Then she looked up and laughed. "Might either of you have a match?" she asked. Some savage.

The other feller didn't make no move, so I handed her a lucifer from my German silver match case. We watched, like people do, while the crushed leaves and bark chips lit and the flame begun to curl around the wood, all on the one match, so I guessed she'd maybe do after all. I handed her the packet of Arbuckle's wrapped in oilskin, and went to the pool to fill the coffeepot.

Like I said, the black man all this time didn't offer no help. I lugged a couple flat rocks over, and when she'd stoked the pot and laid it on them to boil, she started to brush off her hands on her rump like anyone else just done laying a fire, but thought better of it. She stood up, coming about to my collarbone and to the black man's bicep and still tall, somehow.

"Well," she said. "Now for the amenities. I do confess freely that nothing I learned in three years at Mount Holyoke Female Seminary, including a most intensive special tutelage under Miss Amelia Winthrop Dalrymple, prepared me for exactly this occasion. I ask your indulgence of any breach of genteel decorum.

"Since we are all obviously strangers to each other, however, I shall boldly introduce myself. I am Miss Bonita Huevo."

"You sure as hell don't talk like no Indian," I remarked.

She laughed again, that good laugh. "I do when I have to," she said. "And what is your name, Doctor . . . you said you were a physician?"

"I did," I said. "Doctor Hiram Pertwee of East Randolph, Vermont, at your service, missy. You ever get up there whilst you was at that female school?"

"Alas, I fear not," she said, turning to the black man. "And you, sir. May we know your name?"

He just stood, the building fire beginning to light his face, which by and large was a good one. Finally he spoke up, in a deep voice: "I am called Mwando."

Now, this interested me considerable, as a man who'd left the farm to fight in the Rebellion without never having saw one of the colored folks it was all about—or maybe wasn't, I still can't say. Course, they's all kinds of freedmen out this way now, but this one had a kind of outlandish name like he was fresh off a blackbirder. But, the way he talked and held hisself wasn't from nary slave ship, even if they was still running.

Anyways, here the three of us was, out under the stars, so I stuck out my hand. "Pleased to make your acquaintance, Mr. Mwando," I said. He just stood with his arms folded. Made me a hair feisty, I guess—"You could use a couple years at the seminary yourself, pilgrim," I said.

Bonita Huevo was looking at him kind of odd, but she went on, light as if nothing was going on. "And where might you be from, sir?" she asked him.

Well, that's kind of a private matter generally, in these parts, and he took his time answering this one too. Finally he said, "You know the place as Rigel." Aha, I told myself, I knew he wasn't no West African. Dark enough, Lord knows, but the features wasn't right. He had East Africa wrote all over him.

The coffee begun to sputter out the spout just then, so the girl caught up her skirt around her hand and lifted the pot, pouring into the two cups, one tin and the other enamel, that I'd fetched. She gave one to the black man, and didn't seem especial took aback when he stalked off into the shadows with it. Grumpy customer, no ifs, an's or buts about it. That left one cup for her and me.

I've said it before, they wasn't no Tartars raised on the Pertwee homeplace, unless you count my baby brother Elias, and he's settled down considerable now. I waved the cup away when she held it out. "You first," I said.

She didn't make no big thing out of it, which I liked. She took the cup over to a flat boulder by the pool and sat on it prim enough—the boulder, I mean—and asked me to join her. Come to find out I liked the notion, too, so I did.

She looked at me over the edge of the coffee cup. "What brings you out into our wilderness, Doctor Pertwee?" she said. "Surely you're not prospecting?"

"Not hardly," I told her. "House call. Me and a bunch a hard-rock miners was headed up to Hot Spit Crick when a passel of crazy murderin'—your pardon, missy—

heathen come down on us like ducks on a June bug. I got split off from the rest and my hammerhead horse, Poor Harry there, stampeded all the way to here, wherever it is."

She chuckled soft, a thing not every woman can do right. "So that's what they were up to," she said, more or less to herself. "Off playing wild Indian. That passel of heathen," she told me, "was led by my Uncle Bernardito, and when my father hears that they left me in the middle of the trail to go off frightening white-eyes, my Uncle Bernardito just might get skinned alive. He most surely would have, in the old days."

Her daddy sounded pretty important. "Wait a minute," I said. "Your paw wouldn't be Chief Bad Egg—Malo Huevo, sure! Bonita Huevo. You're the daughter that old pirate sent back East to get schooled proper. Well, I don't mind saying you turned out a ring-tailed beauty, Miss Egg."

"Why, thank you, Doctor," she said. "May I take that as just a flattered young woman and not as a ring-tailed beautiful Indian? Somewhere between the mountains here and Miss Dalrymple back in South Hadley, my standards have gotten rather muddled, and I fear I'm a little uppity for a squaw." She finished her coffee and handed me the cup.

"Oh, shoot," I said, going over and filling it for myself. "Don't take what I said about your paw too serious. He's a bandit, well enough, but that's the way he was reared and that's the way this country is. There's plenty around worse'n him, and wearin' store-bought shoes."

She smiled soft, and I slurped up some coffee, and then stared down at the cup realizing I'd drunk from the same cup as a redskin, and finding out it's different when the redskin talks better American than you do. "No," I said slow, "it ain't that your paw ain't white. I just wouldn't admire to get speared by nobody of any color whatever."

She'd been watching me gravely, but now she laughed hearty. "My stars, Doctor Pertwee," she said, "Uncle Bernardito would never do such a thing. He's a sweet old man, and was only livening up the chore of meeting his niece, home again after three years away. After frolicking with you people a while from far enough away so that no one would be hurt, I'm sure he meant to come back to where I was supposed to wait and tell me all about it, with heroic embellishments.

"The only trouble," she said, "is that I thought I could find my own way, and decided not to wait for him but go on. And I got lost."

My turn to laugh, and didn't I just. She looked truculent a spell, then her pout melted and she joined in. It was good.

Then she said, "He's probably worried sick about me, out alone in the night. He'll send a man to the village to see if I did arrive, and look for me with the rest, in case I didn't. Tomorrow I'll be home whatever happens, and with you two gentlemen to protect me in the meanwhile, nothing will.

"That reminds me, though. We two waifs of the storm are accounted for. What do you suppose brings Mr. Mwando here?"

We wasn't about to find out just yet, for Mr. Mwando had disappeared without a word. Well, that was his lookout.

Me and the girl, we gassed a while more until she couldnt' hide her yawning no longer. So I got her my bedroll off of Poor Harry, and whilst she fed the fire to last the night, I tied the hammerhead to a tree he could eat, and bunked down on my gum-rubber slicker.

"Good night, Doctor Pertwee," she said, sleepy as a tuckered kitten.

I told her, "Evenin', Miss Egg."

She murmured, "Bonita."

"Bonita Egg," I said.

It wasn't what I'd call the best night's rest a man ever had, but when I finally had to give up on it, she was already stirring. She'd brung the fire back up, had the coffee about to boil and was slicing bacon from my medical bag into the small cast-iron spider I carry there. In these parts a doctor has to go prepared.

"Good morning," she said, young and cheerful but not offensive about it. "You snore. Not much, but some."

"I'd of done better, given a halfways decent chance," I told her. She was humming again when I went down to the pool to slosh, but not when I come back, blinking and gasping with the cold of the water. Then she was hunkered down by the fire, not moving, looking up at Mr. Mwando, who'd come back; and her face was more Indian than I'd seen it before.

"Well, pilgrim," I said. "Come for breakfast?"

His face was like he was working hard at holding it still. Finally he said, "I must apologize. I did not behave well last night, and I am deeply . . . ashamed of my attitude." His face worked some more, and then he bust out:

"But you cannot know how difficult it is," he said, his deep voice shaking. "We are taught to be tolerant of inferiors, to the degree that their inferiority stems from ignorance. We are taught not to form judgments until we have amassed enough background data to evaluate a man or a situation in terms of it.

"But you simply cannot know how difficult it is! The color of your skin, your food, the manner in which you speak, even the way you move about, the way you think and your—your odor are all alien and distressing to me. Intellec-

tually, I know it is possible you react the same way to me, but emotionally . . ."

His face eased up a mite. "This, then, is the way I feel. I try to keep it from being the way I think. I ask your pardon for my rudeness last night, and your . . . understanding if I should lapse again. However different our cultures, you have been . . . hospitable to me and I boorish in return, and thus inferior to you in that respect. Please forgive me."

Bonita Egg stayed crouched down watching him, more thoughtful now than poker-faced, but I thought it was a handsome little speech and stuck out my hand. "I'll shake on that, Mwando. Buck up," I said, "you're just skittish, bein' new here. Once you learn the ropes you'll be good as any man."

He stared at me for a spell, then smiled a little tight and shook with me. He had a good hard grip.

But it didn't feel exactly right, that grip. Wasn't slithery like some, nor choked too far up on the fingers like a man don't really want to shake awful bad. What it was, was that it was arranged wrong.

I looked down at his black hand before he could grab it back. His thumb wasn't at the top of his palm, but come from the middle of the heel of his hand. And his skin, come to look at it straight out, was dead black and not brown or tan like regular Negroes. Negroes ain't black, they're brownish. I heard that in the South Seas someplace they come a shade of purple, but by and large they're brown, ranging from dark to light, just like whites go light to dark.

Mwando, now, was black.

Bonita Egg's skirt rustled loud when she straightened up. "That's right, Doctor Pertwee," she said. "Mr. Mwando isn't from around here."

"No, I guess he ain't," I said. "Where exactly are you from, Mwando?"

He shrugged. "As I told you, from Rigel," he said. "My companions and I come from a planet in the system of the sun you call Rigel."

"Your companions and you," I said, slow. "What exactly," I asked him, "do you people have in mind here, Mwando?"

He shrugged again. "Colonization, if conditions are right. I am testing those conditions."

"Well," I said, "what's the assay read so far?"

"It is not up to me, but to the machines I brought. Thus far the results are inconclusive, though your sunlight does have elements in its . . . lower range I find personally uncomfortable, and the oxygen content of your air, at least at this altitude, is less than that to which I am accustomed."

"Uh huh," I said. "Yeah. Sorry. But if you're from out of the sky

someplace, how come you talk American so good?"

"My race has a limited capacity for . . . reading minds," he told me. "Your mental images, while of a primitive nature typical of large children, are easily associated with vocal impulse patterns. I find, incidentally, that I must derive my . . . vocabulary from the thoughts of Miss Huevo, since yours make me ill."

Wasn't time to give him a little something else to think about that, because he broke off sharp and looked at Bonita Egg, over to one side.

"Oh, see," Bonita Egg said, calm, her face toward the hills. "There's Uncle Bernardito."

Strictly speaking it weren't her uncle, just a plume of white smoke drifting up into the air from a rise a good ways off. But from a butte some closer, another puff come up, followed by more. Bonita Egg looked at the smoke a while, and remarked, "Uncle Bernardito wants the other serachers to hurry. There are white-eye dog soldiers in the neighborhood."

And casual as you please she tipped the coffeepot over into the fire, and it sent a thick cloud of steam boiling up into the air that her uncle was watching like a hungry hawk. Mwando looked at her with respect.

"I guess we had better be going," he said. He touched something on his belt and we was gone.

Leastways, when I woke we was somewheres else. I was sprawled on my brisket in an open cage at one end of a long, arched room, and Bonita Egg was just commencing to stir nearby.

Mwando was down to the far end of the room, talking to a couple of blacks like him that was sitting in front of a wall with more dials and gauges on it than the cab of a Baldwin locomotive. They didn't turn toward us but he did, talking to them earnest. He come up kind of apologetic just as I was helping Bonita Egg to her feet.

"I regret that there was not time to warn you about the effect of . . . translation to this ship," he said, and it come to me that there was kind of a throb underfoot, like a riverboat. "And," he went on, "I must ask you to come with me, to the rear of the vessel. The captain—" Mwando shrugged, a funny look on his face "—finds your . . . presence distasteful."

Well, hell.

He took us down a corridor past doors leading to rooms with bunks, and a couple laboratories, looked like, and into a good-size compartment with cages that had all different kinds of animals into them. We'd been took to the menagerie.

If I was to of guessed, I'd of said Mwando was embarrassed but trying not to show it. He turned to me. "Doctor, I am compelled to ask," he said. "There is a rather

strong stench about you, Doctor, that is . . . remarkably nauseating. It seems to come from your side pocket. Is there anything we can do about that?"

Shucks, I didn't have nothing in my pocket but my cherrywood pipe and a pouch of shag tobacco. I took the pipe out and Mwando reeled back gagging, so out of politeness, him having been nice enough for somebody from Rigel or whatever, I put it back.

"I gather you ain't a heavy smoker," I said, whilst he fanned hisself and Bonita Egg grinned.

Mwando looked at her thoughtful, and a look come on his face like she'd swore, even though she hadn't opened her mouth and was generally soft-spoken anyways. "He puts that filthy stuff in the . . . pipe, sets it smoldering, and sucks the hot gas into his lungs?" Mwando said, plain as day shook by what he read in her brain. "Incredible!"

"He's right, of course," Bonita Egg said to me, and I nodded, for it is. But that wasn't what was fretting me most.

"What in tunket kind of boat is this?" I asked him direct. "Where in tunket we headed? And why in tunket did you cart us here in the first place?"

"For that matter," Bonita Egg chimed in, "how—um, in tunket did we get wherever it is we are? One second we were standing by the fire, and the next we were lying on the floor here. I don't recall even having been carted at all."

"You weren't," Mwando told her, kind of patient. "You were . . . transported here by the ship's matter-translator, by which I go back and forth to your world.

"As for this 'boat,' it is an expeditionary vessel of our Colonial Service, in which I hold the rank of intermediate scout. At the moment we are not headed anywhere, but are maintaining a fixed position approximately . . . one hundred and fifty miles above the place where we met."

"Above," I interrupted. "You mean, up?"

"Up," he said. "Finally, you are here because you endanger our mission, which would be seriously jeopardized if our presence were known." He looked pensive, like what he was saying wasn't particular fun. "I am sorry to say that since this is the case, my superior officer has ordered that you be penned here with the other specimens, so that your world will not be prematurely aware of us. You will, of course, be treated well both here on the ship and, after our return to Raael, in the . . . zoo."

"Zoo?" said Bonita Egg soft, all Indian again.

"Zoo?" I said too, but some louder, being white and consequently less inhibited, and considering mayhem besides.

"Zoo," said Mwando, flat as

slate. "I assure you, Miss Huevo, it would serve no useful purpose to draw the knife hidden in your clothing. Do not think further of escape. It would only compound an already melancholy situation." He paused. "Blame me if you wish," he said, like he was answering arguments she hadn't got out yet, "but understand it is the situation and the danger it poses for our mission that is responsible for what must be done—no one's personal desire, and mine least of all. I have my orders.

"Zoo," he went on, near to pleading. "You both must surely see that it is the best fate open to you. We cannot release you, lest you warn your world. We could . . . dispose of you, but would prefer not to since you are, among other considerations, valuable specimens, in my captain's view.

"The only choice left is to take you back to Raael. Yet it would be unthinkable and . . . inhumane to set you loose among the people of Raael. You are alien and inferior. You would be bewildered, disadvantaged, perhaps exploited.

"The zoo offers security, and protection from your own weaknesses in the face of a superior society. Of course, if the results of my tests indicate your planet is suitable for conquest, there ultimately will be many of your kind on Raael as . . . contraband of war. More congenial arrangements will then be possible.

"You humans will be employed in various undemanding types of labor on Raael, under the close and protective supervision of those assigned responsibility for you. They will care for you. Within limitations, you would have a society of your own, in your own happy and . . . segregated community."

"Now just a by God minute," I begun, but Bonita Egg laid a soft hand on my arm. "Many feel the same about life on a reservation as you," she said, "and it is pretty strong Uncle Tom's Cabin." She grinned like an imp: "Moccasin pinch, Massa?"

Her grin cleared the smoke out of my head, like she meant it to. Mwando looked relieved. Just then somebody called his name through a little screen window in the wall, and he locked us in the menagerie, telling us not to try to go no place because there wasn't no place for us to go.

Once he was gone Bonita Egg, who could go from schoolgirl to pure aborigine quicker'n scat, went little kid just as fast. She flang herself at me so unexpected I like to went over backwards, hung onto my neck, dug her nose into my vest and whimpered, "Oh, Doctor Pertwee, what are we to do? I'm not brave and I don't want to go to any zuh-zoo!"

Well, fiddle. They's two things you can do with weepy females—hold them and pat their backs or

catch them full in the face with a pan of cold water. I didn't have no pan and I do have the sense God gave geese, so I patted and meantime tried to think of something a mite more to the point. Her hair smelt of violets, which was no help.

In a bit Bonita Egg got hold of herself. She stepped back, head down, blushing—certainly they blush, though they generally give theirselves less cause—smoothed back her hair, and pretty soon looked up clear-eyed, proud, and mostly redskin.

"Forgive me," she said. I didn't say nothing because I didn't have to. "Is there anything that we can do?" she asked me.

"Not a tarnation lot," I told her. "Even if we could get out of this room, which we probably can't, and off this vessel, which we probably also can't, we'd still be a hundred fifty miles high from what Mwando said. That's a mighty long fall.

"No, missy, near as I can tell you, we're pretty much cooked."

What I couldn't tell her was that we wasn't no such a thing. I had a scheme, and the fact that it depended on a couple matters I didn't know beans about didn't change the other fact it was the only idea I got. But, you see, if I'd of told her she'd of had it on her mind, and Mwando or whoever could of leafed through it like a book, and we'd of been deeper in brambles than we was already.

Part of the plan was Mwando said he was uncomfortable poking into my brain. For all of him being a foreigner, I hoped he was just human enough to stick where he was cozy, in Bonita Egg's head, and not put himself out none to slink around in mine, where the scheme was. At least not until the waltz begun.

The other part was the machine that brung us here, that Mwando rode back and forth to work in. I had a long shot figured to make him give us a ride the other way, to ground again. Odds was about, oh, a hundred to one against, but that was some better than no chance at all.

But I couldn't tell Bonita Egg. She didn't waste no time on hysterics or nothing, just went over and sat on a box trying to work up her spirits, and fair breaking my heart. They was nothing to do about it—I took out my pipe and pouch of shag and stoked up, and stared a spell at the unlit match.

Soon as I heard somebody on the other side of the door begin to work the lock, I scratched the match afire and took a deep draw of smoke, holding it in. I was commencing to get pretty dizzy when the door opened and the captain come through—I was kind of glad it weren't Mwando, but the fact it wasn't did kind of stretch the odds, though by then

there wasn't much option anyways. I let the captain have it full in the face with the smoke.

Them Raael people sure got no tolerance for shag tobacco. The captain sagged like he'd been poleaxed, and I caught him and drug him away from the door. "Knife," I snapped at Bonita Egg, who'd jumped up and started over, and she slapped its hilt into my hand almost before I got it said.

"Behind me, missy," I told her, and hefted the captain, who was beginning to retch for air, out so's the other fellers could see him with me behind him, and Bonita Egg's knife at his neck.

"Mwando," I said, not loud.

"I hear you, Doctor Pertwee," he said from down the hall. "Is he dead?"

"You tell me, Mwando," I said. "You look in my mind a minute and see if he won't be dead damn soon, without you put us down out of here."

"I believe you, Doctor Pertwee." I could hear him and the other feller talking low. Then Mwando said, "First let him go free, and we will release you and Miss Huevo unharmed."

"Not likely," I said. The two of them conspired some more, while the captain begun stirring, felt the cold edge on his carotid artery, and froze. "We're comin' out," I told Mwando.

The captain didn't have no great desire to move, but didn't have no great shakes of a say about it neither, and knew it. Keeping him between me and the other two, and with Bonita Egg behind out of the line of fire, I pushed him down the hall and into the big room where we'd woke up a while back. The captain begun to balk when we went into the translator cage, and I might of drew some blood persuading him to hold still.

"OK, Mwando," I said. "You come over and take the skipper's place, and the three of us'll be going along." The first mate or whatever got kind of exercized and shrill at that, but Mwando after a moment gentled him down. The captain got in a couple of strangled cents' worth too, before I bore down on the knife to shut him up in case he was feeling heroic—but I judge he wasn't, for Mwando kind of saluted and come over. He stood easy, waiting to be told what to do.

"Is this rig ready to go," I asked him, "full head of steam or whatever?" He reached out to a little knob and said it was. "You got that thing on your belt you got to push for it to work?" I asked him. A mite took aback, he showed me the small box there, with a big pearly button glowing in the middle of it.

"OK," I said, "stand right next to the boss and don't do nothing pip-witted or sudden." Soon as he got into position I booted the cap-

tain stumbling out of the cage, jumped in back of Mwando with Bonita Egg behind me quick as a doe, and reached under his arm to jab that button.

Everything melted into rainbow, and I felt cold and funny as hell just before passing out clean. Last thing I recall was kind of a sigh from Bonita Egg.

When I come to, my head was in her lap and we was back on the ground, good American flies buzzing and never sounding so homey. Mwando was standing there looking down at us sort of odd.

"He could have pushed the button again while we were unconscious," Bonita Egg said, "and taken us back. He didn't do it."

"No, he didn't," I agreed. "Why, Mwando?"

He shrugged. "A number of reasons," he said. "Among them . . ." and he nodded around.

I craned my head up more than it really wanted to go and let it fall back where it felt better. But not much better. We'd lit right smack in the middle of the Indians.

Don't know when I seen quite so many Indians. The face that stood out, though, was glowering electrical storms from not more than five foot away. The hostile it belonged to was gray-headed, with a band of red satin tying up his hair, and wearing a faded calico shirt with a U.S. Cavalry pistol-belt around it, and a breechclout, and high buckskin moccasins. He was sitting cross-legged, not moving, staring at me, not saying nothing; and without being told, I got the lousiest feeling I was meeting Bonita Egg's daddy.

He spoke. "Where you been with my daughter all night?" Malo Huevo said. Leastways that's what I found out later he said, on account of he said it in his lingo and I don't talk it.

Bonita Egg started to say something, but he shut her up with a flick of his hand, face never moving. She started to talk again, what with being uppity from all that education, so this time he glowered at her direct and pointed off with his thumb, and she lifted my head off her lap and got up and went. Wasn't until then I found out my hands was tied, and so, come to notice, was Mwando's.

Wishing I was someplace else, I got up on one elbow and into sitting position. Not cross-legged, though—I swear I don't know how redskins sit that way hour after hour. Hurts like hell in about half a minute. Anyhow, then Mwando begun to talk.

The look on Mwando's face was a caution. He weren't particular scared, what with him being superior and all, but he did have to go picking through Malo Huevo's brain for the Mexican and redskin words he wanted to use, and he wasn't enjoying the trip.

Worse than that, though, he

didn't have the sense to lie. He must of told it just the way it was, for early in the game that scowl of Bonita Egg's paw swung round like the muzzle of a howitzer until it was full on Mwando. The big black idiot kept going until he was done, and then gave back Malo Huevo glare for glare.

About that time Bonita Egg come up. She'd changed out of her schoolgirl clothes for an Indian rig, and instead of that beaded headband, she had knotted a red strip like her paw's around her hair. Them beads was Plains Indian anyway. No matter, she was still the pertest little filly of any persuasion I seen in a coon's age.

And this time she waited to put in her two cents until daddy give her the sign. While she was talking, one of the older men who'd been hanging back in the crowd begun kind of mooching up until he was standing behind Malo Huevo's right shoulder, trying to look official.

Bonita Egg pointed at him once during the palaver and he flinched, though Malo Huevo didn't flicker, and I bet this was Uncle Bernardito. And I bet that Uncle Bernardito weren't in good odor for the time being with Malo Huevo, and I bet that Uncle Bernardito weren't the very best friend Mwando and me had in this camp, what with everything being pretty much his fault. And I won all three bets.

But anyways. Bonita Egg, dignified and spunky as you please, wound up her say, and Malo Huevo's glower at Mwando didn't nicen a bit. Got some worse, if anything, but it was hard to say. Only thing sure was that they was ants at the picnic for fair.

Then Uncle Bernardito got in his licks, and it was more like fox in the henhouse and no powder in the gun. He bent old Malo Heuvo's ear to a fare-thee-well, yammering and now and then yelping to the crowd, at which they'd holler and brandish whatever weapon they was carrying. And they was all, the men anyways, carrying at least one.

Finally Bernardito run out of either lies or wind. Malo Huevo, still frowning prodigious at Mwando, sat there—oh, a hour easy, pitchforking in his mind through what his little girl had said, and what his wife's brother had said, and what Mwando had said. Seemed to boil down chiefly to choosing between whatever damn lie Bernardito told to square hisself and whatever damn truth that fool Mwando'd blabbered.

Then, because I was sitting close, I could see an extra little wrinkle come by Malo Huevo's right eye. By his standards the old bandit was laughing—and the bull was out of the barnyard and up on the porch, for it turned out Bernardito and Mwando was going to settle the question by fight-

ing, and Malo Huevo didn't much care who lost or won.

Well, naturally there was a bunch of yipping and joyous whooping then, for there's nothing nobody likes better than mortal combat where there ain't the slightest chance he hisself'll get hurt. The whole pack formed up a ring and begun laying bets amongst theirselves, and somebody hacked Mwando's hands loose, and somebody else hauled me up by the scruff of the neck and flang me outside the circle. I got up and watched anyways.

Bernardito of course had his own knife, about the size of a courthouse flagpole. One redskin offered Mwando a pigsticker that looked a little dinky to me, but the tarnal idiot wouldn't take it. Just stood with his arms folded, looking superior. Finally the redskin shrugged and stuck the blade under Mwando's belt, and scampered out of the way grinning.

Bernardito, he was considerable smaller but more wiry, and he'd been in the mat business a long time. He went into a knife-fighter's crouch, point of the blade straight out, other hand up and wary. He danced around Mwando like a terrier baiting a bluetick hound, but Mwando didn't turn a hair nor move a muscle, and the audience begun to hoot. Finally Bernardito got sick of it, yelped and come in.

Mwando's hand flipped to his belt, but not for that toothpick they give him. He touched something there and a kind of blue haze sprung up around him. Bernardito run into it full tilt, and where his outstretched blade touched it there was a flash, and a buzz, and Bernardito flipping through the air like he'd been kicked by a mule.

He got up shaking his head and staring at his knife, what was left of it. All that was there was the handle. He flung that down and snatched an obsidian-tipped lance off one of the spectators and heaved it pointblank at Mwando's chest. It just sort of disappeared in a shower of sparks, and so did the arrow from the bow Bernardito tried after that, and the hatchet he threw after the arrow.

The crowd was getting edgy by then. Bernardito, half out of his mind with being scared and mad all to once, looked around wild. He spied one of the few rifles I'd seen here so far, a rusty caplock Springfield, grabbed it, cocked it and let fly.

He was near as surprised as Mwando was when a red-rimmed hole showed through the blue haze, high on Mwando's left shoulder, and the black man went down.

Come to find out he wasn't bad hurt, but even so it seemed Bernardito had offended the heathen notion of fair play. Malo Huevo booted him out of the band on the

spot, and he slunk off. Meanwhile, Bonita Egg and me had both run over to Mwando, but they wasn't much we could do—even if my hands hadn't been tied, I wouldn't of wanted to reach into that damn blue haze.

Mwando lay there bleeding and looking startled, until he finally heard us hollering to turn down his fog. Groggy, he touched his belt and it died away, and it was then we found out the ball had missed the bone and whatever arteries they got on Rigel or wherever, and gone clean through. Bonita Egg fetched some more or less clean rags, after cutting me free, and I bandaged him up near good as new.

Soon as that was done they tied our hands again, his and mine. Seems as far as Malo Huevo was concerned that while the matter of truth or falsehood wasn't exactly decided, they wasn't any real question about innocence or guilt —whatever it was that was done, we done it, and we was to be staked out on anthills come morning.

However, with the show over and nightfall coming, all the people had other things to do, so once they trussed us to a pole off to one side, we was left pretty much alone. Malo Huevo hauled Bonita Egg willy-nilly off to his fire, and Mwando and me begun to talk.

"What was that weapon which injured me?" he asked, wonder in his voice. Funny, he didn't sound so damn lofty when he said it.

"That?" I said, enjoying his puzzlement in kind of a sneaky fashion. "Oh, that was an old Springfield, Model of '63, I'd judge, left over from the War of the Rebellion. Throws a .58 caliber lead bullet. Can't shoot a patch on up-to-date weapons, of course —nowadays we got breech-load repeaters that'll beat it a mile."

"Yes, and these repeaters," Mwando said, "do they shoot lead bullets also?"

"Sure," I said.

"Lead!" he said, dazed like. "Our force-shields are . . . impervious to all the . . . radiations of outer space, to the materials of which meteors are made, to any projectile a sophisticated technology can devise. But not to —who would have dreamed of solid pellets of anything as soft and dense as pure lead, flying at high velocity?

"Why," he said, almost excited about it, "the exteriors of our ships are covered with force-shield projectors like the one that failed me, and with propulsion units liable to detonate if sharply struck—all completely vulnerable to your bullets. Perhaps sometime in our dim history—but who in this day and age could have forseen bits of lead?"

"Welcome to modern times," I told him.

Just then a little kid come by, not a stitch of duds on, and begun pegging rocks at us. He wasn't much good, though, and didn't have much luck.

"Say," I said. "If you fellers can read minds and all, then how come you have to talk to each other out loud? Seems like you shouldn't never have to open your mouths without maybe you wanted to holler or spit, or something."

He was only paying half heed. "It would be intolerable to have one's thoughts open at all times to everyone," he said. "From childhood we are able to shut our minds off from others at will, opening only rarely and then only to those we . . . love. In truth, almost the only opportunity I've had to use the ability is in contact with unprotected primitives such as yourself."

"Oh," I said. "Yeah, well, it strikes me maybe if you people can read minds except most of the time, and have blue-haze armor that works except against something harmful—well, it just strikes me maybe you folks ain't so superior after all."

He didn't say nothing, so I figured I had him there.

The little kid roamed off, disgusted with hisself. Then another thing come to me. "Say," I said. "Another thing. How come if you had that haze handy, you didn't fire it up when I grabbed you on your boat?

"It would've knocked me flat. The captain didn't have no chance to but you did, and still you didn't do her."

It seemed like he hadn't heard, but finally he spoke, slow and half to hisself. "I'm not entirely sure," he said. "I believed you would not kill me, though I had been less sure of your intentions regarding the captain. He was a stranger to you, and you might well have . . . sacrificed him if the situation were desperate enough. Yet I sensed you would not kill me because you knew me.

"This we consider the mark of a . . . higher animal, although an animal still. I should warn you that while . . . exploration of your mind is personally uncomfortable to me, it is nevertheless quite possible. Thus—" he paused and shuddered a little "—I know now I were, I mean was correct in my surmise aboard the boat. Ship." He shook his head.

"So no one," Mwando went on, "needed to die—not you, not me, not my superior officer. More than that, though, I had felt in Miss Huevo's mind the horror, the revulsion at the mere thought of being caged, however benevolently, in a zoo on Raael. It was intense, unexpectedly intense. It made me sad.

"The society in which I was reared teaches us that other orders of life are inferior. Yet I have come to wonder if this is so—

whether our culture is indeed superior. Is it only gifted in areas in which another might be deficient, and itself deficient where the other is stronger—just as individuals within any race vary? Our technology is more advanced than yours—but are we? Is it merely our machines?

"It is quite . . . unsettling to think thus.

"Even so," he said, "I was secure in my . . . conviction that at least our machines were unassailably better. Then I discovered that our most advanced defenses are . . . pathetically vulnerable to a primitive weapon fired by a savage who eats dog with his fingers out of a pot."

Then he busted out: "In the name of sanity, Hiram, why do you have civilized words and grammar deep in your mind and, that notwithstanding, speak the way you do? It makes discourse most difficult."

"Just because a feller has a bona fidey mail-order medical degree and read *Pilgrim's Progress* all the way through," I told him, "don't mean he's got to put on the dog."

Then I said, "Wish you hadn't mentioned that, Mwando. I ain't had a bite to eat all day."

Didn't get one, neither. The little kid come back and flang rocks from time to time, but by and large nobody else cared.

Where people get the notion redskins are stoical, I swear I don't know. Lashed to that pole, Mwando and me had nothing better to do than look at them damned pagans eat their supper, and laugh and carry on, the kids sporting around, the young bucks strutting for unmarried girls cleaning up after the meal and sneaking off with them afterwards, the middle-aged folk jawing about God knows what-all, and the old geezers off in clusters watching everybody else and finding fault.

Now, maybe you plunk any one of them down in a bunch of strangers and it'd be different—he'd be scared, so he'd fold his arms and look stern and dignified and like a damn fool. But as they was, you dress them decent and teach them to talk right, and if you squint they'd be just like civilized. Not as happy as here, of course.

Howsomever that may be, a couple hours after sundown they begun shutting up shop. Old Malo Huevo glared at us from where he was bedded down under a double spruce, and I could feel his eyes long after the fires'd died down so I couldn't see his face. And I could remember Bonita Egg's face, worried and helpless, right nearby.

Pretty soon the little kid pitched his last rock and waddled off yawning, and then there wasn't nothing to do but hear our guts rumble. And get cold.

We was about froze when, stepping soft and delicate, Bonita Egg come out of the shadows.

She motioned for us to be quiet, but hell, I just about couldn't of talked if I'd of wanted to, which it didn't seem like much of a idea anyways. She cut us loose with her knife and, beckoning us to follow, went back into the shadows. We started out after her, Mwando stumbling a little at first. That was when I remembered he'd got shot, but they wasn't nothing to do about that now.

We went quite a ways without saying a word, once having to wait without moving neither, whilst a buck riding nighthawk ambled by, about a hundred yards off. After the hoofbeats had died away and we could start up again, Mwando chuckled to hisself and Bonita Egg whipped around and shushed him like you would a kid. We moved on.

Finally she stopped and waited for us to catch up. Well, waited for me to catch up, mostly, since Mwando even with that hole in him was right behind her and treading near as quiet. Me, though, I didn't kick over no large trees nor fall down more'n fifteen times throughout.

"Now then, Mr. Mwando," Bonita Egg said, like her Miss Amelia Winthrop Dalrymple would of been proud to hear, "what so amused you back there, pray?"

Mwando didn't ruffle at all. "I was just reflecting," he said. "The thoughts of young men assigned to night patrol must be almost . . . universal. I can clearly recall contemplating mutiny under similar circumstances myself, at his age. And I wish him better fortune with that attractive young lady tomorrow night."

Which reminded Bonita Egg of something. "I will trouble you, sir," she said, "for that thingamajig with the button that is on your belt. I would just as soon not be abruptly transported aloft to your menagerie again."

He chuckled again. "Please don't concern yourself, Miss Huevo. For one thing the—ah, thingamajig is only an activator. The translator itself is buried back at the camp, approximately under the spot where your father is sleeping, far too distant for me to . . . abduct you again.

"For another, I have no intention of abducting you in any case. My association with you and Doctor Pertwee has convinced me that neither of you is a suitable specimen for a Raael zoo. I would for the present far rather . . . be your brother than your keeper."

She looked up square into his face for quite a spell, then smiled. "I am glad," she said. "Are you all right? Your wound—"

"His wound is fine but he'll have about eighty-seven others if we jaw all night," I cut in. "You

let me be the sawbones, Bonita Egg. You be the guide and show us how in tunket to get out of here."

She set her chin, all Dalrymple, but eased off when Mwando said, "Doctor Pertwee is both a competent . . . quack and a good judge of priorities, Miss Huevo. Pray lead on." She struck out without nary other word and we strung after her, through the dark.

Only thing was, I wondered where Mwando got that "quack" —out of Bonita Egg's mind or mine.

Well, we tramped up hill and down for hours, whilst the Big Dipper swung up around the Pole Star, and first the Pleiades, and then Orion come out of the eastern hills. The country was just beginning to flatten down—and I was commencing to wonder whatever happened to Poor Harry, who I'd left night before last tied up back where all the Indians was now, but who wasn't with their ponies on account of I looked—when the sky begun to lighten and Bonita Egg pulled up short.

"We'd best spend the day in that clump of trees up ahead," she said. "My father will be looking for us, and if we try to move in daylight, someone will surely see us from the hills."

They was water in the trees, and welcome too. We still hadn't had nothing to eat, for one thing Bonita Egg'd forgot back East was to always take grub and a canteen if you're going to move a foot and a half out of camp. There just ain't any being sure you'll be back right away.

Anyhow, there we was, watered if not slopped. When we was settled in the trees, I asked her how come they was women and children with her paw, and she said the whole band was on the move because of cavalry around, heading toward other country, and that was why her old man was particular vexed with Uncle Bernardito, Mwando and me for spoiling the rendezvous.

"Bonita Egg," I said. Damned if I weren't getting fond of the little gal—though maybe it weren't too surprising, considering this was our second night together and that's a betrothal where I come from. Mwando was sound asleep by then, by the way, what with his bullet hole.

Well, like I said, "Bonita Egg," I said.

"Yes, Doctor Pertwee," she said, her face just catching the sunrise.

"I'll make sure you get back to your daddy just fine, once we get to town," I told her. "And I think maybe I'll have a talk with the Army. Malo Huevo ain't all the pirate he's cracked up to be, for all he was going to stake us to a anthill. If I was him and you was my daughter, I'd do the same."

She smiled bright as that dawn. Her hand come out kind of shy

and squeezed mine warm, soft but firm, and it felt good. "Thank you very much, Doctor," she said. "Would you be offended if I went to sleep now? I'm awfully tired."

"Me too," I said, and was. No sense in standing guard—if the redskins tracked us, they tracked us, and we wasn't getting away on foot if they seen us. I was only half awake when her voice come again:

"Doctor Pertwee?"

"Uh huh," I said.

"It wasn't I who thought 'quack'," Bonita Egg said.

"Uh huh," I told her, and went to sleep.

It was a little after noon by the sun when I woke, the touch of her hand on mine again. This time it was urgent and not warm, though, and without opening a eye, I knowed she was scared. Then I blinked and seen she had cause—at the edge of the trees staring in was a Negro cavalry sergeant, and he was the biggest two-legged animate object I ever saw.

Without turning he hollered in a deep voice: "Lieutenant? Ovah heah, suh!"

Mwando come wideawake, but the three of us lay without moving as the sergeant stepped aside to let a fat little shavetail bustle up and peer in. He wore his kepi square.

"You there," the shavetail said, and I knew right then we wasn't going to get along.

"You there yourself, Yellow-legs," I told him. I was infantry in the Rebellion.

"Come out where we can take a look at you," he snapped. "Sergeant, your sidearm."

The sergeant, feeling foolish and looking it and knowing it and not liking it, held his Colt on us whilst I helped Bonita Egg up, and the three of us filed out of the shadows into the sun. The lieutenant stared at us like we was some new kind of bug. "You there," he said to me. "Who are you? Hurry up, there may be hostiles in the area."

"I'm Doctor Hiram Pertwee," I told him, "and I was lancing a boil on Phil Sheridan's butt in the War when you was toddling around in just a shirt, so you mind your mouth."

Strictly speaking, it wasn't Sheridan but his horse; still it did the trick, for the shavetail at least stopped scowling. "Doctor Pertwee?" he said. "I received a dispatch by heliograph yesterday that a party of miners, survivors of a brutal Indian massacre, had reported you missing and presumed dead. I have orders to locate your remains."

"Well, you done it," I told him. "Now that's settled, how about some chow for me and my friends here? We ain't et since Halley's Comet."

He looked doubtful. "We were just about to have luncheon," the shavetail said. He was a real salty

soldier. "You, of course, can share mine, and I guess your darky can eat with the men. But I don't know about the squaw . . ."

If he'd of only knowed it, he was in worse mortal peril just then than if he was sitting in Malo Huevo's lap. From all three of us, come to that. Trouble was, we couldn't hardly explain that Bonita Egg wasn't no run-of-the-mill squaw but daughter of the most feared war chief in the territory —or that far from being a ordinary darky, Mwando had just dropped out of the sky to scout for a invasion from another star.

At least I thought we couldn't. Bonita Egg didn't entirely agree.

"You, sir," she remarked sweetly, in pure Dalrymple, "are a boorish fop."

Well, that ain't the way ignorant savages is supposed to address graduates of the United States Military Academy. His eyes bugged out, and then that fine-honed brain added two and two and come up with three—and then the three quivered and busted, and I didn't need Mwando's stiffening by my side to know the lieutenant had made a four.

"You there," he said to Bonita Egg. "Why, you're that hostile's daughter! I've heard about you, educated back East and all!" He checked his kepi to make sure it was square, puffed out his potbelly and said, formal as a half-drunk bailiff: "Miss—er, Princess Huevo, I have the honor to put you under arrest. You will kindly consider yourself a prisoner of war."

She looked at him, all wide-eyed innocence. "But, Lieutenant," she begun. "I'm terribly sorry, Lieutenant, but we hostiles have a keen appreciation of the ceremonial, too—and I didn't catch your name . . ."

"Dinwiddie," Mwando said. "Winfield Scott Dinwiddie."

"Lieutenant Dinwiddie," Bonita Egg went on. "Exactly what war am I a prisoner of, sir?"

Didn't faze Dinwiddie a bit. "A state of hostilities have existed," he told her, "since your father and his band of insurgent renegades broke the peace by attacking a harmless party of miners engaged in an errand of mercy, and massacred Doctor Pertwee here. Yes, what is it, Sergeant Chesnut?"

The tall sergeant spoke in his ear, pointing at me, and Lieutenant Dinwiddie cleared his throat. "You raise an intricate point, Chesnut," he said. "Yet as far as the Department and this detachment are concerned, Doctor Pertwee was the victim of a brutal, unprovoked assault and his murder will be avenged, at least until my orders are changed."

His face brightened. "And we have a delightful surprise awaiting Malo Huevo and his outlaw gang, to be sure. Here, Doctor Pertwee,

as an old-time military man you should enjoy this." Damn pup. He led me over to where a bunch of soldiers with red stripes down their pants instead of cavalry yellow was hanging around a horse-drawn limber.

They stood aside. It was a Gatling gun, all polished brass and steel, its bundle of barrels glittering in the sun. Dinwiddie's voice dropped to a reverent blissful whisper, like a man in church to marry off his old-maid daughter. "Two thousand rounds a minute," he said, "two thousand rounds of .45-70 military ball every sixty seconds. Can you just picture in your mind, sir, what this will do to Malo Huevo's pack of cutthroats?"

I didn't say, but yes I could. I could see that infernal pepperbox mowing down anybody with red skin, men, women, children alike, shot into dollrags, all the folks I'd watched doing the normal things of living back at Malo Huevo's camp, chopped into mincemeat.

Bonita Egg'd come up behind me, nobody telling her she couldn't, and without knowing the least thing about Gatling guns, she kind of gasped because the blamed machine looked so efficient. Mwando was with her, and didn't have to be told—he could read Lieutenant Dinwiddie's mind without, I expect, taking too long at it, and he could also calculate what the gun would do to his people's ship.

Just then Sergeant Chesnut called "Suh!" and pointed to a rise off maybe half a mile. They was a Indian on horseback up there, standing still, and the sight like to drove Dinwiddie out of his wits. "Hostiles, hostiles!" he yelled, hopping up and down. "Boots and saddles, trumpeter! Mount up, mount up, and I expect every man to do his duty!"

Damn if he didn't mount a full-scale assault on that one lousy Indian. They was any number of things going against this, George Armstrong Custer's ghost being one and the redskin likely being bait for a trap being another, but there wasn't no reasoning with Lieutenant Winfield Scott Dinwiddie.

Sergeant Chesnut tried it but the War Child wouldn't listen. Meanwhile Bonita Egg was looking hard at that hill. She must have eyeballs like a hawk, for she said to me soft, "It's Uncle Bernardito again."

At least that argued against a ambush, him having been kicked out of the tribe yesterday and a lobo now. So chances were no more harm would come to Dinwiddie's men than maybe some unnecessary blisters and a busted leg or two. Good thing, for the lieutenant surely had the blood lust upon him, the silly little squirt.

Chesnut did get through to him

for a second, at that. Dinwiddie looked back at us like he'd forgot we ever was, which he had, and detailed a Trooper Finnerty to stay behind and guard us. Finnerty didn't seem to mind, and watched the rest of the detachment, Gatling gun and all, go pounding off toward that hill.

By then Bernardito, of course, was long gone. Trooper Finnerty settled down against a tree, content as a hound in warm dirt, and poked tobacco into a corncob pipe. Mwando looked alarmed and moved well upwind, Bonita Egg and me behind him grinning. We looked at each other.

"Speaking as a official United States Cavalry corpse," I said, "I venture to say we ought to get the hell out of here. That pip-wit—" and I nodded toward the cloud of dust boiling toward the empty hill —is bound to have some ornery notions about you, little lady, when he comes back with nothing but a sore behind."

"As for you, Mwando, him or that sergeant may even wonder just how you knew his name when you hadn't been proper introduced."

They really wasn't nothing to argue about, so what we did was I went up to Trooper Finnerty and hit him on the head with a rock. We took his mount, with Bonita Egg up aboard, and Finnerty didn't look no less contented as we left.

We cut toward the nearest hill opposite to where Dinwiddie went and got behind it, figuring to range into high country quick as could be so's to find Malo Huevo and get him his daughter back before they was real trouble, worse trouble than anthills. The prospect pained me some, I noticed. Her leaving, I mean. Well.

We was for making time so there wasn't much chance for palaver, but once some distance was behind us we took a break, Bonita Egg swinging down from the McClellan saddle in my arms light as duck fluff. I stood with my hands on her waist maybe a mite longer than needful, and then because somebody had to say something I said, "How come your daddy ever sent you back East to that school, Bonita Egg?"

Damn if she weren't a touch flustered too. "H-he would have sent a son, if he'd had a son," she said. "Loot that might have gone toward weapons went for my tuition instead. My father thought we would either have to fight the white man all our lives or live in peace with him all our lives, and that in either case we should know more about him. So I went to learn—and learned more, perhaps, than . . . than I should have."

There was quiet for a time. Then I cleared my throat and turned to Mwando, who was staring off at a chokecherry bush like

he'd never seen one before. Maybe he hadn't, come to think of it. Anyways, I spoke real careful:

"What about you, Mwando? What plans you got?"

He took a little while answering, then said, slow, "I would like to return to my ship."

He paused again. "I shall report to my superiors, Doctor, that your planet is not suitable for conquest and colonization. I have . . . wrestled with my reasoning and my sense of duty, and this is my decision.

"It is not that I have come to know you and Miss Huevo, have . . . conceived sympathy and even affection for you both. This is something I would have to overcome, and would overcome in my report—if there were not other factors involved.

"Nor have I, I believe, fallen into the easy error of false identity with the population of a . . . prospective vassal world as the result of close exposure to its culture and individuals. This weakness is fatal to a conqueror, and thus we in our own culture are educated against it." He smiled. "In this instance, ability to know what is on an adversary's mind is as much handicap as advantage, by the way.

"We of Raael may not be as superior as we believe ourselves to be," Mwando said, kind of wry, "but without that conviction of superiority, of higher destiny, we would not have the audacity to bridge the stars. Right or wrong, without that belief, that faith, we would stagnate.

"No, Doctor, I regard this world as unsuitable because of weaknesses in your own culture—your cultures, really. You people are too diverse. By my own observation you range from the primitive nomad to the comparatively advanced technicians who produced the Gatling gun and are quite obviously on the brink of even greater advance. I do not envy your next few generations, Doctor.

"Your world is still far too . . . heterogeneous, Doctor Pertwee—for conquest. Races, cultures, societies and individuals differing among themselves and even more within themselves—and each requiring a different mastery technique. It would be quite wearying for an older world such as Raael.

"You are too . . . adaptable. Malo Huevo's primitives—forgive me, Miss Huevo—have mastered the gun. You two as individuals adapted to our own machines and attitudes to escape us. Even if our own technology were not by a . . . freak of fate vulnerable to your still crude weaponry, the diversity, adaptability and frightful energy of the human race would make conquest impractical. Elsewhere there are other, easier worlds to choose.

"Yours is not young and ignorant enough to be cowed, nor yet old and resigned enough to be docile. I see you as . . . headstrong, headlong, intensely individualistic, unable to gracefully concede defeat, heedless of risk because of lack of experience—your intellectual development outstripping your rational maturity: adolescent. It would make you a formidable enemy.

"The fact is, Doctor Pertwee, we are too sophisticated to cope with you, and you are just primitive enough that you might beat us. In a few generations perhaps we may try again."

"Yeah," I said, "OK. That's fine, then. No more lollygaggin', we got to move on."

Well, we got maybe half a hour. I was up on the horse, Bonita Egg insisting I was entitled by venerable age and almost getting smacked for being sassy. Mwando and her was yammering together like jaybirds and we was in the middle of a shallow basin, oh, about six mile from where we was headed when I turned in the saddle.

"Mwando," I said, "how close you got to be to that translator doohickey of yours for it to work?"

"The activator will trigger it from anywhere within a radius of . . . fifty of your feet," he said, "but the translator will only project life forms and materials bearing animal residues to the ship from a radius of four feet. Why?"

"Not quite wide enough," I told him. "We got company."

Him and Bonita Egg looked up and saw, ringing the rim ahead of us like amber beads on the lip of a soup dish, more Indians than I ever hoped to have to count. Maybe it was only fifty, seventy-five—but then, that was plenty more than we really needed at the moment.

Even with them being Bonita Egg's folks she was a mite alarmed. "If we'd been able to get Mwando back to his ship first, and then you and I had approached Father while he was in camp, I'm sure it would have been all right," she said. "But there are only men up there, painted for war. I don't know if he'll listen . . ."

Mwando cut in. "He probably wouldn't have the opportunity," he said. "Look behind."

We did. There on the rim back of us was a dozen blueberries, with something glittering brass and steel in the middle, and a short, fat blueberry jumping up and down in front. We was caught smack dab between Malo Huevo and Lieutenant Winfield Scott Dinwiddie's Gatling gun.

A bugle call floated one way and a war cry the other, and both beads and berries begun rolling downslope toward us. They wasn't no place to go but straight up.

Or so I thought, anyways. Bonita Egg sort of shrieked, and

we looked at her, and she was staring into the sky. Plumb over our heads a speck that might of been a bird got bigger and bigger until it was big as a barn, hovering and not making no noise. It was the most outlandish sight I ever seen, and it had that blue haze of Mwando's around it, like St. Elmo's fire.

Well, naturally the Indians and the cavalry both hauled up and swapped ends scooting soon as they seen it. In a minute there was nothing in the basin but us and dust, and that tarnal flying silo hanging overhead. But then specks of heads come over both sides like kids peeking out of a loft at a shivaree, only it was sure one hell of a shivaree we was at.

Dinwiddie's voice come thin and reedy. "You there!" he yelled. "Doctor Pertwee! Whatever that thing is up there, tell it to go away. All I want to do is recover your body and take Princess Huevo back into custody. I don't want to have to engage the object—please tell it to go away this minute!"

Just about the same time a high-pitched hollering come from the Indian side and then, scaring hell out of us all, a great booming voice from overhead. Mwando told us later that usually he'd have some sort of little machine to talk to the boat with, like a telegraph key without wires except you talk into it, only he'd left it up there with his sidearm. So they had to talk to him direct with a electrical megaphone.

Any case, the upshot was Malo Huevo and the people from Raael wanted about the same as Dinwiddie, and that was the problem. The chief wanted Bonita Egg back along with Mwando as a matter of principle, whereas Mwando's bunch wanted him and both of us besides, I suppose demanding three instead of two on account of they was superior.

Trouble was, couldn't all of them have their own way. We looked at each other.

"The ship," Mwando said slow, "is armed with a . . . I don't find a word for it. It can eradicate five men in one blast, but the ship is only a scout vessel, lightly armed, and has just one. A combat ship would be able to wipe out both parties if necessary, but this craft would, I fear, be destroyed by a lead bullet from one side or the other—and all of us in the explosion along with it."

"That's grand," I said. "Near as as I can see, the Indians has got everybody outnumbered, the cavalry has got everybody outgunned, and your folks can out-explode the lot. We got ourselves a three-way Mexican standoff.

"Only reasonable thing to do is each of us go off with our own people, before we get attacked by Chinamen tunneling up from underfoot. Now all we got to do is tell them that."

It weren't easy, but we done it. Bonita Egg yelled to her paw, and stamped her foot and got her way. Mwando bellowed up to the flying silo in his lingo and finally convinced them. Had to promise he'd try to get another specimen someplace for the zoo, but they agreed.

And I tried hollering some sense into Lieutenant Winfield Scott Dinwiddie, USA. Stood to reason he'd be the hardest, and he was, but damn if Phil Sheridan's butt didn't do the job again.

He led his men back over the ridge, Gatling gun and all, on his oath to go five mile north and wait two hours before doing anything else stupid. Malo Huevo took his horde south, same deal. The Raael people had to go ten mile straight up, being foreigners.

Then, all three of us feeling like we'd been sat on by an elephant that just got up, we set off east for the clearing by the stream, where Mwando's translator was. I was feeling kind of gloomy too, what with us going separate ways shortly, and so I think did Mwando and so did Bonita Egg.

Leastways she took my arm as we walked, Mwando taking his turn at Finnerty's horse. We talked some but not much.

Still, we didn't have no chance to get too mopey and sentimental. For when we finally broke through the brush into the clearing we met in two nights ago, and Malo Huevo had his camp yesterday, why, there was Uncle Bernardito again.

He was squatting about eighteen paces away, in the shade of the double spruce his brother-in-law'd slept under, and he was throwed down on us with a gun with a muzzle the size of Hoosac Tunnel. We stood with our mouths open a spell, then Bonita Egg started toward him with a happy little noise. He shifted the gun toward the middle of her chest, and she stopped short, pale, her hand fluttering to her mouth. Uncle Bernardito was feeling peckish.

Me and Mwando didn't move. Not a muscle. "Is that another one of those rifles?" he asked, low.

"Yep," I answered. "A .44 Henry. Shoots sixteen rimfire ca'tridges, fast as you can work the lever. More than enough for us." A notion come to me. "What'd you say the range was on that activator thing of yours?"

"Fifty feet," he said.

"Oh, well, in that case . . ." I said, and jabbed him in the stomach. Right on the button.

Uncle Bernardito drifted straight up, fading away with kind of a surprised look on his face. He disappeared in the branches of the double spruce, and I helped Mwando to his feet. "Specimen for your zoo," I said.

After that it was, like I mentioned, sort of quiet and solemn with us. We only had about fifteen

minutes before we was all supposed to go our ways, and we talked about nothing, like people do when they ain't really glad to be going.

Mwando did say one interesting thing before he left, though. "I consider it fortunate," he remarked, "that Uncle Bernardito was carrying that Henry rifle—though I hope my companions disarm him before he regains consciousness. Our scientists may want to examine it closely, for it occurs to me that rather than our invading you in a few generations, we of Raael may be beating off an excursion by Earth."

"Lord, I hope not," I told him. "Nobody'd survive an expedition under the likes of Dinwiddie—not you nor us."

We all smiled, but it was sad. Later, after I'd shook that funny hand and Bonita Egg stretched up and kissed his face, he pressed the button and wasn't there no more.

You know something? Sometimes since then I forget exactly what color his face was.

Well. Anyways, we stood back like he'd warned us to do, and in a couple minutes the ground shook and broke, and a big bullet-shaped machine come roaring out of the dirt and disappeared into the sky. Bonita Egg and me kind of just hung onto each other a time, and then there was a kind of cough behind us.

It was Malo Huevo, alone. She run to him and he hugged her, staring the while over her head at me. Then, his face not changing a whit, he stuck out his hand and I shook it too.

Bonita Egg turned to me and we looked at each other a while, and then she was crying hard, and she said, "Oh, to hell with Miss Dalrymple," and she kissed me on the mouth.

"I'm proud to know you, Bonita Egg," I said. "I'll miss you."

"Don't," she said, like her throat hurt like mine. "Don't miss me. See me again."

"I'd like that, Bonita Egg," I told her, and they was gone.

That left just me. I was standing there remembering all of a sudden Rigel is a bright star in Orion's left foot, and wondering why I wasn't hungry, and feeling sorry for myself generally, when something wet bit me on the neck. Damn if it weren't Poor Harry, the hammerhead, trailing the reins he'd chawed through the other night.

Damn, he was good to see. His saddle, of course, was long gone, but I shinnied up on him bareback, and for once he didn't buck.

"OK, Harry," I said, "now let's go find the dim-wit lieutenant and make a professional call. Somebody's got to look at that lump on poor Trooper Finnerty's head." ◀

He was the most famous musician in the galaxy, but when he came home all they saw was the hump between his shoulders, the symbiote slug . . .

MUSE

by Dean R. Koontz

HER HAIR TUMBLED OVER HER breasts like burned butter, darkly yellow, darkly gleaming with reflected bits of the dim amber ceiling light, parting now and again to bare the greater wonders beneath that it was attempting to conceal. She came out of the bathroom, blotting her frosty lipstick, and said, "What?"

I stretched out on the couch, half of my face buried in it, flat on my stomach, also naked from the waist up, and pointed to the jug on the floor. "Put Icky on for me, Lynda."

She came across the floor on dancer's toes like a leaf blown through the windless chamber of the grav-plane, a wonder of curves and indentations, mounds and recesses. She sat on the edge of the couch, her hair dancing to conceal her treasures and only partially succeeding, and dipped her hands into the wide-mouthed jug, lifting Icky out and holding him like he was an unmolded jello serving or a hunk of raw liver.

"Careful," I said.

"You shut up, now. Icky and I know what we're doing."

"Just the same—"

"Shush!"

She placed the slug on my back, directly between my shoulders, pressing it gently to get its adhesive layer firmly attached. Then she pried up the anterior end of it and tucked its sensory flap under so that the porous side was against my skin and so that Icky would not have to do the job himself with a lot of unpleasant, wet squirming and wriggling. As much as I thought of Icky, I didn't much care for it when he began to twitch, slipping and sliding over my skin. But Lynda had the flap under and the slug on properly. She was experienced, as

she said. But I still worried about Icky.

"All's in place," she said, signaling the finish of the ritual.

I felt the hair-fine tendrils probing through my flesh, snaking painlessly through my skull and making gentle contact with my brain in all the necessary places. Icky was with me. Icky was *in* me. A peculiar sense of well-being swept over me, filled me to the center of my body. My muscles felt better toned, and my senses were sharper just as they always were immediately after contact. My hands itched to hold the guitar, to finger the strings, to throb the chords from the shallow wooden box, to play the latest numbers so that Icky could experience them.

"We land in fifteen minutes," Lynda said, slapping me on the ass. "You better finish getting dressed." She stood and returned to the bathroom, shaking every ounce of her slim body with every step she took.

"If there were time—" I began.

"But there isn't," she said, winking. "So hurry up."

Homecoming. Lynda stood beside me, holding my hand in hers, fingering my fingers with her tiny ones, and Icky was on my shoulder, concealed beneath my black leather suit. No, not concealed, really, for the lump of his jelly body rounded my back where it ought to be concave, thickened my neck where it normally would have been straight and thin. Lynda was comforting me, petting my arm, winking, whispering things that she knew made me feel good, things about how good a musician I was, about how everyone loved me, about what she would do with me if she could ever—for a change—get me alone for a moment without having to rush. She was great. There was confidence in her eyes that gave me confidence too. There was love in them that calmed me. Icky (his real name is unpronounceable outside his own star system) comforted me with his tendrils, with the wordless discussions we carried on inside my head. He projected images of assurance to me, mellowed me, prepared me for what was to come.

Lynda took the last private moment we had to squeeze my hand again.

Icky touched me reassuringly with feathers of protoplasm.

And the doors opened before us like the shutters being thrown wide on a window. Beyond lay the airport.

And the people . . .

There was at least eight thousand, maybe ten thousand there. They stretched away in all directions, people of all ages—but mostly the young—waving, holding up banners that said LOVE

YOU, LEONARD CHRIS and WELCOME HOME, LEO!, cheering, cheering, cheering. Nine years had passed, and I had climbed a ladder out of obscurity to become the most famous musician in the galaxy, known not only to the race calling itself Mankind but to the Seven Races, understood best by my own and by Icky's, but listened to by all. Still, it was a revelation that a backwater city the size of Harrisburg, Pennsylvania, could turn out something like this crowd to meet me. I began, I think, to tremble.

Guards moved up the platform, surrounded us, moved us down toward the limousine that waited below. It wasn't a grav car, but an honest-to-God museum-piece Ford with tires and everything. We were ushered into the back seat while two motorcyclists pulled in front of us on real, vintage motorcycles. They were going all out.

"Not bad, is it?" Lynda asked.

Icky asked something similar that had no words.

The crowd was unwilling to let us pass easily. They pressed close, anxious to touch the glass through which they could see me. They screamed my name.

"Mostly girls," Lynda noted.

"Jealous?"

"No. They don't want you. At least not all of you. They just want a scrap to take home as a souvenir."

After the crowds had passed, we sped on toward the hotel, our cyclists pressing on their sirens. I reached into my jacket pocket and took out my father's letter once more. It was wrinkled from previous readings, but I had to see it again, to know I had interpreted it correctly. Really, there was no mistaking what it said: "Son," it said plainly, "son, don't try to bring It with you. Come by yourself, and you'll be made welcome, very welcome. But if you bring along that goddamned worm, if you bring along that puppet master that rides you like a demon, that perverts your body and contaminates the thing that makes you a man, then stay the hell away. If you bring It with you, son, then stay in some damn hotel somewhere. But don't come home. And if you bring It with you, if you insist on carrying It along, then I don't want to see you. I don't want to be reminded of what It has done to you."

But of course I had to bring Icky. And now I was returning home triumphant, but I was denied entrance to my own home, the place of my childhood, to the garden I had immortalized in *Childflowers*. I bit my teeth together, ground them against one another, trying to recall my anger from the depths where it had settled since my last reading of the letter. At first, I had gotten strength from my fury, from an-

ger at the names my father had called Icky. But that was all gone now. It was impossible to stir anger at simple, brutal ignorance. The only things left were pity and disgust, and neither one could sustain my anger. I choked as I re-read the last line of the letter, swore I would not cry for my father's stupidity.

Lynda took my hand.

Icky touched my mind and soothed me some . . .

Once in the city proper, the driver fooled the crowd at the hotel by driving the limousine down a side street and through an alleyway, bringing us into the hotel through a service entrance. Only half a dozen people waited there, and the police used diluted chemical mace on these, rushed us through into safety.

We stood in a room full of produce and cartons of canned and jarred food. A row of garbage cans lined the left wall, and the aroma from these was extremely rotten. Standing well away from the filthy containers was the manager. He wore a black suit (not leather) and a white carnation on his lapel. He also wore a smile as broad as a jack-o'-lantern's—and just as fake. He came to us, took Lynda's hand and squeezed it lightly. He dropped it, shook mine politely. I could tell he was reluctant to touch the hand of a human-slug symbiote, but he overcame that magnificently (apparently reminding himself of the publicity his hotel was receiving) and kept his smile intact.

"Such a pleasure, Mr. Chris. My name is Cavander. Harold."

"Mr. Cavander," I said politely enough, considering what I was thinking about him. "Could we be shown to our rooms, please. I must rest for the concert tonight." I was quite sufficiently rested, but I wanted out of the garbage room and out of this fellow's sight. The way he eyed my hump gave me chills.

"Uh—" he said, suddenly embarrassed.

"Yes?" I asked impatiently.

"The Grande Suite—"

"Yes?"

"Well, the fact is that we got our schedules a little confused, and we now find that we booked two parties into the Grande Suite—"

"A normal suite will do," I said, getting his point. Once it was known that a human-slug symbiote had stayed in his precious Grande Suite, most honeymooners and most "aristocrats" would not consider it fit for love-making and aristocrating. He was only protecting his business. Still, I hated him for it.

He seemed relieved and almost managed to smile a genuine smile. But he checked himself just in time and pasted the phony one back on. "This way, then. And I

do hope you will excuse this terrible inconvenience. I don't know how we could have been so stupid as to—"

When Cavander had overseen the deposition of our luggage (a car had followed with it, and he stood talking with us until that car arrived) and had ascertained that we had sufficient towels, soap and toilet paper, I bid him goodbye and closed the door hard behind him.

"The little creep," Lynda hissed, plopping down in an overstuffed leather easy chair and kicking off her shoes.

I opened my guitar case and took out my beautiful Trevelox Electro and set about hooking up the amplifiers. I could pay back pudgy Harold Cavander for what he had done. I could blast the ears out of the entire floor. And I didn't think he would have enough guts to ask me to stop. He might be afraid I would go elsewhere for accommodations. And though his prejudices kept him from serving us well, he would not want to throw away all that publicity by refusing to serve us at all.

"What should it be?" I asked Lynda.

She scrunched her toes into the deep pile carpet. "The one you wrote last night, *Mind Dark.*"

"Yeah. That fits," I said.

I played a few chords tentatively. The music welled through my bones, slithered over my fingers and punctuated the rooms with nearly tactile sound. I went back to the beginning and started again, full volume this time. I felt good. Icky felt good. He rejoiced, touching my mind to tell me that it was a good thing, this *Mind Dark.* I sang the words throatily like I would sing them tonight on the big stage. And for a minute, the room and Lynda receded and I *was* on the big stage, seated on a stool before five thousand enthralled fans, Icky humped between my shoulders. I played like I had never played before, but in my vision, the people began leaving, drifting out as I started the second song. And as they left, I saw why they would not stay: each of the five thousand was my father, each had his face . . .

"This is your dressing room," the man said, pointing in a cubbyhole where a dresser and full-length mirror were the only furnishings. But I was not so concerned with the room. It was good enough. I was more interested in the fact that the little man was a human-slug symbiote with a hump on his shoulders where his own Icky rested.

"How long have you had him?" I asked.

He looked perplexed for a minute, then brightened and smiled. "Icky?" He grinned broader, and I could see that he was even now

in some sort of delicate communication with his symbiote partner. "Oh, going on three years now."

"What is the give-take?" Lynda asked.

"Icky's a romantic. He likes to travel. He wants to see parts of this world. He'll stay with me until I die, then move on to someone else, always looking, always taking things in."

"And you?" I asked.

"Same thing. I can't go to Icky's home planet, to his star system. But he can give me visions of every world he has ever seen simply by touching parts of my brain with his filaments. I guess you'd say I'm a romantic too."

"You're the first symbiote I've seen since we arrived," I said.

He frowned. "There aren't many here. Small-city provincialism. This is in the Bible Belt, you know. The conservative Cumberland Valley. Maybe a few hundred here, that's all. But there must be thousands in the cities—the big cities."

"Eleven million symbiotes," Lynda said. "I just read that somewhere."

"I envision a day," the little man said, "when— Oh, your mother is waiting to see you. I left her out by the office. You want me to show her back?"

I looked at Lynda. "Yes," I said. "Please."

Later, after my mother had come, subdued, and gone, I sat on the bare stage, looking at the back of the curtain, my guitar across my lap. In moments, that velveteen monstrosity would part, revealing the audience to me and me to the audience. I would make no remarks but begin immediately with *Childflowers*. I felt good. *Childflowers* would mean something, for my father had relented, had asked to see me after all. True, the message my mother had delivered was terse and unemotional. He wanted to see me backstage an hour after the performance, after everyone was gone and he would not be seen conversing with me. He was still prejudiced. I was prepared for one of his persuasive arguments to try to get me to give up Icky. But I was also confident that I might get him, at least in some small degree, to accept the symbiote relationship. He would have to accept it someday, for it would never be my choice to break it off.

Then the curtains opened.

And I was scared.

Like always.

Childflowers spun from my toiling fingers like golden threads from a magic loom. I did a double rendition of it, bringing the entire length to something just over fourteen minutes. When I finished, I was dripping sweat, and the audience was applauding wildly. Icky touched my mind, and some of my nervousness was

gone. I played *Mind Dark* next, my song about prejudice, and I played it with conviction.

Lynda and Icky and I waited on the dimly lighted stage. The audience was gone now. The clamorous boom of applause had whispered off through the rows of seats. The echo of my music had been stilled. We were waiting for my father.

When he came, it was with friends.

He came down the center aisle, a big man, clean-shaven and dressed in a gray suit. Behind him came two friends, apparently. This was some consolation. It wasn't to be an entirely confidential tete-a-tete. He was not so ashamed that he had to hide the meeting entirely from the eyes of the public. I sat on the stool, Lynda on a chair beside me, waiting for him to mount the stage.

The three of them came up and stood by the right proscenium pillar, the two men still behind my father. "Len," he said, nodding his gray head, his hands held at his sides, his entire posture one of stiffness and uneasiness.

"Hello, Dad." Lynda said it first. I followed her example. There was still pity in me.

"It was a good show," he said awkwardly.

"I'm glad you came."

One of the men walked across the front of the stage and stood against the left proscenium pillar.

Walter Chris came toward me, an older version of myself. His friends remained at each side of the stage like bodyguards. "Why, Len?" he asked simply, opening his palms in the gesture I was so familiar with. Always when I had done something wrong as a child, he had opened his hands in wonderment just that way, had shrugged his shoulders just so.

"Why what?" I asked. I was trembling. I wanted to make him understand Icky, but I was determined he should open the subject.

"Why bring It. I asked you not to bring It."

"I had to, Dad."

"But why?"

"A slug," I explained patiently, "requires a host. It would die in twenty-four hours if I should take it off. I usually leave Icky off for no more than twelve hours at a time. I had to bring him."

"You've got everything. You've got money, fame. Why did you have to humiliate your mother and me with It? That wasn't right, Len. It wasn't right to humiliate us like that."

He came towards me then with something more than fatherly concern in his eyes, twisting his face into a leer. The two friends advanced from the proscenium pillars.

"What is this?" I asked, starting off the stool.

"We have a little group—" my father started.

"What kind of little group?" Lynda was off her chair too.

"That doesn't like the sort of thing that's been happening—all these symbies, all these puppet masters."

"They aren't puppet masters!" I protested. I felt like I was shouting down a deep well, so deep that not even my own echoes returned to me. "They take, yes. But they also give!"

"It's the sign of a weak character," one of the other men said. "Only a weakling needs boosted by an alien worm like that thing you're wearing."

"Dad," Lynda said. "Dad, stay away from him."

"You stay out of this, honey."

I was backing toward the rear of the stage, toward the brilliantly colored flats that had backed me during the performance. They were closing in from three sides, each one with some degree of determination lining his face like a death mask.

"What are you going to do?" I asked, backing against the flats.

"Help you," Walter Chris said.

My fingers found the edge of a glow-blue flat on my left. I swung, wrenched at it, sent it toppling to the left, the canvas striking the man on that side and carrying him to the floor. But the other two were on me. I heard Lynda scream. But screams weren't stopping them. Walter Chris had set out on a holy crusade to redeem his son, to reclaim what he fancied had been taken from him, and he would not stop until he had killed Icky.

I kicked upward with a knee, caught the remaining accomplice in the crotch. He rolled off, gagging.

I shouted at my father.

But he had sealed his ears.

He drove a big fist into my face. For a moment, everything swam about me. I could see Lynda leaving the stage, running for help, but she was bobbing wildly up and down. Blackness swept toward me, but I fought it off. I had to fight it off. If I passed out, it would be the end for Icky—and, consequently, and end of sorts for me.

I tried driving a knee into his crotch, but he had learned from what I had done to the other fellow. He blocked the blow, struck me again.

I swung a fist, pounded helplessly against his side. He was a bigger man than I, and he had not gone to fat.

The fellow I had kneed stood and came to the old man's aid, pinning my shoulders with his knees while my father worked me over. My face was swelling and bleeding, and one eye had already swollen shut. With every blow, strength drained from me. The knees hurt where they dug

into my shoulders. I writhed, trying to break free. I could not. Icky was excited, but he managed to sooth my panic and keep me acting rationally. I could only hope now that Lynda would return in time with help.

But she didn't.

When he had dealt the punishment he thought I deserved, he and his accomplice rolled me over, pinned me on my stomach, and worried up my coat and shirt until they had uncovered Icky.

I screamed.

But there was no one to hear.

I writhed and kicked.

But I was tired, and they were two.

They stuck fingers under the pulpy bulk of the slug. Icky quickly retracted his filaments so that my brain would not be damaged when they yanked him away. Then they tore him loose. I was still screaming. My throat was raw. I rolled over as they stood, grabbed at my father's ankles. But he had Icky raised over his head. He threw the slug to the floor. It hit with a sickening splashing noise and wriggled helplessly. The other man snatched it up before I could grasp it, threw it down again. And again. Then my father had it once more. They exchanged Icky until he had been thrown too often. He was mangled and did not move any more.

I was crying. The stage was as something seen through a rain-splattered window. They tried to help me to my feet, but I struck out weakly at them and drove them back. I stood, weaving, feeling the stage dance beneath my feet. I remember that my father was smiling.

"Now you—" he started to say.

The third man had found his way out of the blue flat.

"You sons of bitches!" I snapped. The words were strained between my teeth so that nothing but hatred and bitterness came out. It hissed like escaping steam.

"Now, Len, simmer down a little."

But I could only curse. Every foul thing I could think of, every four-letter word I had ever heard came bubbling out in a torrent of rage.

"Wait," my father said. "Now wait just a damn minute. We got rid of it for you. We're trying to help you see you can do without the slug for a crutch. Whatever it is you need, son, we can give you. Come to us. If it's love or appreciation, we've got more than enough for you."

"You stupid damn wretch," I hissed. I was still crying, and the words were interspersed with sobs, I guess. "I have nothing now. You can't give me what Icky gave me. Never!"

"Just give us time to—"

"Time, hell. Icky gave me my talent, you damn fool!"

He stood, stunned, working

his mouth without managing to make anything come out of it.

"That's it; that's right! He could not make music through his own body, since he had no fingers, and no 'ears' to appreciate Earth music. But he had a perfect understanding of what made a song. It was Icky who composed *Childflowers* and everything else. He took my memory and made beauty with it. I got the money and fame. He got the satisfaction of creation. It was a mutual agreement. It was symbiosis. And I got more than the money and the fame. I got to be a part of that creativity, got to work with it, to offer suggestions to it. I was in a world of poetry, a world of loveliness. The things I wanted to say he said for me. He vented the ache in me. Without him, my soul would never have found release, and I would have contained it and rotted with it as you and your goddamned friends have. Can you really replace what Icky gave me? Not a fraction of it, you can't!"

He turned from me, turned toward the steps.

I took a few steps, grabbed my Trevelox Electro and brought it down on his shoulders.

I was still sobbing.

He took the blows without resistance.

When the other two tried to come near to stop me, I swung furiously at them. They backed off to let me return to my father. I brought the instrument up and down, over and over. I might have killed him had not Lynda arrived with the help that was too late for Icky. They pulled me off him. I remember that. Then, until I woke in the hospital, recovering from shock, I remember nothing.

I have a new Trevelox Electro, just like the one I splintered and ruined. But there is no second Icky, no slug I have found with his same abilities. So I play the old songs, though I never play *Childflowers,* and Lynda sits with me by the window, watching the dark to whom I sing.

THIS MONTH'S COVER

Chesley Bonestell's cover depicts a view of Saturn from Titan, its largest satellite. Mr. Bonestell's paintings are currently being exhibited at the Smithsonian in Washington D. C.

Hoke Norris has been a newspaperman in North Carolina and Chicago since 1955. He is former literary editor of the Chicago Sun-Times *and is now a member of the editorial board of the* Chicago Daily News. *Mr. Norris has taught creative writing at the University of Chicago; about 40 of his stories have appeared in various magazines, including* Playboy, Redbook, Cavalier. *His first story for us is one of the best we have seen on the subject of transplants. It begins with a remarkable and successful operation. "Medical science does what is possible," said Dr. Oxford. "That's all there is to it." Not quite all.*

THE PATIENT

By Hoke Norris

AT THE END OF A LONG WHITE corridor, in the area of two white swinging doors with ground glass set in their upper halves—on a certain bright spring afternoon in Chicago—there was a movement, a stir, an activity that indicated the completion of a task. A nurse shouldered open one of the doors and hastened into a records room. Two other nurses followed bearing clipboards. Briefly through the opening and closing door one could see men and women moving slowly away from a mound of white upon an operating table that stood in the glare of surgical lights. Through the ground glass one could then detect the lights going out, dying slowly like stars. In a moment, slow as priests in procession, men and women in the green caps and gowns and loosened masks of surgery passed through the doors and paused for a moment in the corridor. Finally the patient was rolled out by two orderlies. He was accompanied by a resident and a nurse and buttressed about by suspended bottles and pendent tubes. The doctors and nurses watched him

down the corridor and out of sight at a turn.

Two of the doctors detached themselves from the group and entered a door marked "Chief of Neurosurgery." One of them was the superintendent of the hospital, Dr. Ben May, a short, stout, ruddy man with blue eyes and crewcut gray hair. The other was Dr. John Oxford, so different from the other as to be a contradiction. He was tall, slim, dark, rapid in his movements—an impatient, single-minded man, one might say, scornful of ignorance and impervious to opposition.

"A drink," Dr. May said, opening a cabinet upon bottles and glasses. "If ever we needed one . . . There's at least one thing they haven't improved and diluted with mass production, John. Alcohol. Good old C-two-H-five-OH."

"Yes, that," Dr. Oxford said, "and the wheel. Refinements, perhaps, yes, but not improvements. The wheel was perfect from the beginning—the perfect geometric figure. And we haven't improved the knife either, Ben. It's still just a knife, and can't be anything else. Do you realize that what I did in the last nine hours is only a refinement of what the barbers used to do?"

"Ah, at last, an humble surgeon. I never thought I'd live long enough to find one."

"Yes, for the moment, perhaps. I don't want a drink. I want a shower. Water would be the same too if they'd close all the factories."

Dr. May raised his glass in unspoken toast and salute, and Dr. Oxford bowed, a sardonic movement matched by a faint sardonic smile. "I thought I'd be elated, but I'm not," he said. "It is quite a thing we did in there, you know. I'm satisfied, of course, and glad it's over, but not elated. I wish I could feel just once more the delight, the ecstasy, really, of my first appendectomy. I was elated. By God, I could do it! Everything since has been anticlimax. Even this." He paused, smiling, but thinly and coldly. "You still have your misgivings, don't you, Ben?" he said.

"There's an old, old medical joke, John. It ceased to be funny long ago, but one remembers it, sometimes, on certain painful occasions. The operation was a success. The patient died."

"The operation was a success, Ben, so far."

"And the patient?"

"He'll survive. That was a splendidly healthy body that chance gave us."

"He'll survive even this—?" Dr. May paused, with a short, mirthless laugh. "I don't know what to call it."

"We haven't plundered the Greek or Latin for a name yet. We will. Something like cerebro-

transferectomy. Such words seem to please the pedants among us."

"Very well. I'm a pedant and I was only an observer in there, at your invitation. But I can imagine what others will call it. Miracle, no doubt."

"Miracle? No more so than the first tonsillectomy. That must have been quite an occasion too. And it was a brave man that first ate an oyster, you know."

"Yes, or first went to the moon or for that matter, first ventured in a boat beyond sight of land."

"Medical science," Dr. Oxford said, pleased, lecturing now, "proceeds to a certain stage, and then does what is possible at that stage. That's all there is to it."

"Not quite all, John. Here we've created, after a fashion. Out of two, one. Tell me, John, who is that person sleeping it off now in the recovery room?"

Dr. Oxford, in his turn, laughed shortly and without mirth. "That's totally beyond my interest and my competence," he said. "I'm not a psychologist, or a psychiatrist, thank God, or a parson, or a sociologist, or a philosopher. I'm a scientist. I do things because I think they're possible and might be interesting. To hell with the fine points. At Harvard a long time ago, Ben, I heard a great man say that a desire to help humanity is a poor substitute for curiosity. It still is. The helpers of humanity have never really helped humanity, and you know they haven't, until they've been shown the way by people with curiosity, pure curiosity undiluted by dogma or creed or philosophy or ethics or any of that absurd claptrap. I can't imagine that Pasteur had the welfare of sheep in mind when he cured them of anthrax. Who can care whether a sheep lives or dies?"

"Or a human being?"

"Haven't we been over all this before, Ben?" Dr. Oxford brushed off his cap and ripped off his mask, breaking the cord at his neck. "This is a private hospital, isn't it?" he demanded. "Aren't we free to run our own surgery?" He subsided, with a sagging of his shoulders and a shrinking of his body. "Ben," he said, "I'm tired. I'm not going over it again. I want that shower. Then I want a twelve-ounce steak, rare."

"Yes. The thing is done, isn't it?"

"Yes, Ben, done, done, done and double-done, and there'll be others." Dr. Oxford disappeared into his bath.

Dr. May sighed, finished his drink, and went to his own office and showered. He wasn't hungry, though he had not eaten for ten hours. He was simply weary. Weary and worried. He sat at his desk for a moment, contemplating his immediate future. He would have to prepare a statement for the news people, and

he would have to face the two families. He brushed a hand across his brow. One patient with two families. It was a complication that Dr. John Oxford, for all his brilliance, could not prepare one for. Of course, one of the families had no reason—not even a right—to be here. Dr. May thought he had settled *that*. But this unwanted family was here, and apparently nothing was settled. On the contrary, he sensed that new and unsuspected and unwelcome complexities would soon be evident. He went out into the corridor, slowly and reluctantly.

Perhaps humanity, he said to himself, had still not learned to detect the complex in the simple. In the beginning, the decision had seemed simple and uncomplicated. One man would surely die—or, better, one body would surely die; another body might live if the most radical surgery in all history were performed on both. Save parts of both . . . So stated, the thing was as simple and uncomplicated as the first primitive transplantations of skin, kidney and heart. Little question there—save one life by using part of another life. But now—now—Dr. May walked the long corridors, he sighed, he swallowed past his dry throat and wet his dry lips with his tongue—now surgery had ventured for the first time, so to speak, beyond the sight of land. It had entered the unknown sea of human consciousness, even of human identity, and it would find there, Dr. May was beginning to realize, unsettling questions that humanity might not yet be prepared to answer. The man perhaps even now awakening in recovery—was he the one, or was he the other? What was his name? Who was he?

Should have settled this before, Dr. May muttered, in anger. He drank at a wall fountain and wiped his chin with a white handkerchief. But Dr. John Oxford was an overpowering man, certain, gifted, impetuous, vain, arrogant, disdainful of secondary questions, overwhelmingly persuasive when he deigned to persuade. Strike now, pick up the pieces later. Dr. May sighed as he walked. Now, in the ebb tide of inspiration and accomplishment, the pieces were becoming evident all about him. Dr. May told himself, with distaste, that he was among the pickers-up-of-the-pieces left in disarray by genius. Perhaps there always had to be such humble servants, God help them. The jargon called them administrators. He sighed again, and entered a door that would open upon one of the two families.

The patient had a long, slim body. Somewhat more than six feet lay between the top of the bandaged head and the two

points the toes raised in the lower end of the sheet. He was, now, to the world, a large bandage—a tubular form beneath smooth white—and the lower half of a face. What could be seen of the face seemed rather young, but also prematurely aged. It was darkened by a day's black beard and heavily lined from nose to corner of mouth, and an old scar bisected, vertically, the left half of the chin. The eyes, beneath the hem of the bandage, were sunken and shadowed. Bottles hung on racks beside the bed, and tubes and wires coiled about and vanished beneath the sheet and the bandage upon the head. On a wall a television screen exhibited the impulses of systole and diastole—a ragged linear record of steady pulsation, interrupted at even intervals by faint, star-like explosions. It was, all things considered, a healthy heartbeat that was dramatized there in electronic representation. A resident sat at a small table, his eyes never leaving the screen. Another resident gazed unwavering at the inked line of an electroencephalogram. This record also was steady and unremarkable; a brain pulsed too, with tiny discharges of electricity. Two nurses and three older doctors, in white smocks, stood about the foot of the bed; gazing at the patient. There was a quietness, a waiting in the room. But then, suddenly, the pen of the electroencephalogram fluttered upon the moving tape, and the watching resident whispered, "My God, he's dreaming."

"What'd you say?" asked the other, without taking his eyes off the screen.

"He's dreaming. Wouldn't dat ole debil Oxford like to know dat dream?"

"Wouldn't we all? And cut out that terrible accent. It isn't funny."

One of the doctors moved to the patient's side and bent over, looking close at the closed eyes. "Yes," he said, "he's having rapid eye movement. I can just see it."

He was climbing a hill. The path was narrow and rough and bordered by cactus. On the spikes sat strange vulturine birds singing repeatedly the opening bar of Beethoven's Fifth. The air was clear and cool all about him, but above, the upper reaches of the hill were covered by luminous white clouds. Baudelaire, impaled, crucified, on the spikes of a cactus, spoke to him. "Les fleurs du mal sont plus beau que les fleurs du bon." Yes. "The flowers of evil are more beautiful . . ." He paused in his translation, said yes again, and looked about. Now he was alone. The poet and the birds had vanished. He saw the spikes of the cactus, and a stone in his path, with the sharpness of perfect focus—needle point above, and below, a mesh

of tiny brown veins on a tiny white globe. How odd. He was not wearing his glasses. How could he see so well without his glasses? He dreamed he was awake, and then in a moment realized that he was. His eyes were open. He saw a faint, clear, straight line in the ceiling, somewhere directly above him. It was all in the world he saw—a single thing that represented all things. A kinship, a tension, grew between it and him, then an affection, a fondness, a vast relief. He was alive, living, existing, being. Without knowing why, he was surprised and pleased. Then, again, he wondered: How can I see so well without my glasses?

"He's coming around."

"My God, he really is."

"So soon. Aren't drugs splendid?"

"Dat ole debil Oxford really done it dis time."

"Oh, shut up!"

The voices distracted him for an instant, but he kept his eyes steady on the line in the ceiling. He tried to speak—thought he did speak—"My glasses—why don't I need my glasses?"

"Mrs. Marshall," Dr. May said, "I don't think the children should be here."

"And why not?"

Dr. May restrained a quick answer, and regretted the drink he had taken. Alcohol did loosen and relax; it also opened the mouth to regrettable flippancies. He studied his hands; stout, round hands, fat fingers, with tiny black hairs between the joints. The three children—a boy of about twelve, two girls about ten and six—sat quietly with their mother, but they regarded Dr. May with the dark, sullen, reproachful gaze of perplexed and perhaps resentful children. Mrs. Marshall herself was a tall, unnaturally slim woman with hair dyed blonde, and a thin, stony face in which one could see traces of an earlier, and rather hard, beauty. She might once have been, for about six months in her life, a genuine belle. Her voice was strained and unreasoning, louder than needed, and now angry and impulsive. Dr. May looked up from his hands and started to speak, but she got there before him.

"And why not?" she repeated. "They are his children. This—that—in there—wherever you've put it—that is the body I married and they know as father. His—his glands gave them life in me. The children should know, they should hear. And I tell you he is still my husband, and he is still their father."

"Perhaps we could explain to them later, Mrs. Marshall, after we've talked . . ."

"Isn't he my husband and their father?"

"Mrs. Marshall," Dr. May said, with desperate patience, "we went over all this, remember? We explained to you. Your husband was dead, Mrs. Marshall. The bullet had effectively destroyed his brain. Under all the accepted definitions—"

"Definitions," she cried, with an exposure of teeth, a spitting of the word. "A lot of double-talk."

"Please, Mrs. Marshall," Dr. May begged, "let's *think*. Let's not just *react*."

The children had drawn together, toward their mother, their eyes dark and smoldering—a family against the world. Definitions, Dr. May said to himself, would define nothing at all for this mother and these children. In their own way they resembled Dr. John Oxford—impregnable minds fixed on the single objective . . . Well, a Pope had defined death, the courts had defined death, commissions had defined death, Congress, legislators, physicians, philsophers, theologians, the A.M.A., the A.C.L.U., the S.P.C.A. for all he knew—everybody had spoken with great authority and assurance, and they had all said in essence that death came with the irreversible cessation of the functioning of body and brain, and it all meant nothing at all to most people. And who *could* say when life ended? The first heart transplants, relatively uncomplicated though they had been, had tainted all definitions with uncertainty and doubt. The politicians and the learned men had never quite been able to purge it of that strain. And after today, what?"

"But Mrs. Marshall," he said, with a deep sigh, sitting forward and looking straight into her wide, carnivorous, brittle eyes, "Mrs. Marshall, you agreed, remember? You signed the release. You said if we could use—if we could use him, then use him. You said he would want to be used if it would help another. You seemed very kind and generous, and most cooperative, with your consent, with the details of his medical history, with everything. And so we proceeded without any doubts of your position. Now it comes as rather a shock—it's rather ungracious of you—"

"But I was all upset, Doctor," she interrupted once more. "You know I was. And when I got home this morning—" She sobbed, once, dry and hard; her body shook with her sudden seizure of grief. "When I got home, there was his picture on the desk in the living room, there were his clothes in the closet, his new suit, the cigarette he never finished smoking, there on the floor, a drink still there in a glass, and there were his children . . . No, doctor, I tell you, I can't give him up, and I won't."

"But you have given him up. I tell you, Mrs. Marshall, when one loses the functioning of his brain, when it can no longer use the functioning of the other organs of the body, can no longer learn and remember and maintain consciousness—when it has been destroyed by disease or fatally pierced or battered by a hard object—then you've already given him up, you've had to, whether you want to or not."

"Doctor," Mrs. Marshall said, "I'm through arguing. When can I see my husband? When can his children see their father?"

"We'll have to settle this matter first, Mrs. Marshall."

"See my lawyer."

"If necessary."

"He is going to be all right?"

"Respiration, heartbeat"—Dr. May paused, to phrase carefully—"brain activity are all normal, under the circumstances. We hope for a recovery."

"Very well. Then when can we see him?"

"Mrs. Marshall," Dr. May said, rising, "you will have to wait a little longer for your answer."

Without pausing for her reply, he left quickly, to go to the other family.

The patient felt, with low-key yearning, that there was something he wanted, something habitual and now denied him. With the feeling came a certain annoyance for his inability to remember what it was. Like an unfinished play—an unresolved chord—a meal without an expected desert. Not a presence, but a lack, an absence, a need unmet. Remotely, faintly, generalized, an ache spread through his consciousness, and then mobilized its parts into a nebulous gray globe behind his eyes; a nausea stirred in his body. A little too much to drink the evening before? A midnight brandy that had been one too many? He could not remember having had a drink for a long time. Yes, he whispered to himself, of course not. He had been ill; desperately ill, in hospital, operated on, but weeks ago, too long ago now to cause that ache and nausea.

He stood before his class, one student seated distant and hostile in the back row. "First of all, the title. Do you know what the title derives from? *De Profundis Clamavi*?" The student slouched, smoldered with resentment and rejection. "It comes from the Latin version of the opening stanza of Psalm 130: 'Out of the depths have I cried unto thee, O Lord.' How is that appropriate to Baudelaire's purpose here?" With a long, slim, wicked knife the student was carving upon the arm of his chair. Chips fell soundlessly at his feet. The feet were bare. "Very well, the poem itself. Please translate . . . *J'implore ta*

pitie . . ." But I dream, said the patient to himself. Surely I dream now. Peut-etre à rever. Never had he taught such a class. Certainement, je reve. *Reve Parisien*—let us consider that poem now. Please translate . . . *De ce terrible paysage* . . . *Of that terrible landscape* . . . No, not *passage*. That's a false cognate, there . . . Go on, translate. *Le sommeil est plein de miracles*! . . . Please, translate please . . . *Sleep is full of miracles!*

A cigarette. That was what he wanted. Yes. To smoke a cigarette. How strange.

He heard a rustling of forms gathering themselves about him.

"Well, now," said a jolly voice, from the center of a gray disc above his face, "are you all right? Are you awake? Can you hear?"

He tried to nod but his head was immobilized. The disc changed to pink, and formed itself into three dimensions, nose, chin, lips, eyes, a moon seen at the other end of a luminous tube. Perhaps he had put on his glasses. He could not know.

The face withdrew and was replaced by another precisely like it, another moon, smiling down the tube. "Mr. Graham," it said, with exaggerated movements of large, moist lips, "can you see us? Can you hear us?"

He tried to speak—again thought he spoke—"Will you give me a cigarette, please?"

How odd. He had never smoked in his life.

"At the moment, Mrs. Graham," Dr. May said, "I can tell you only that he is doing as well as could be expected, under the circumstances. Heart, respiration . . ."

He paused. Mrs. Graham was a small, soft woman wearing a rather loose dress that almost, but not quite, offended good taste—flowered, pleated, belted, a bit too large for her body. Her eyes were gray, her hair short and dark, her face undistinguished—a little stout, round, but sweet, and now weary and sad in the late afternoon light from the window. He liked her—she would be a good wife. A good *faculty* wife. He had seen hundreds of them, self-effacing of their own skills, ambitions and capabilities, almost invisible supports for their husbands while they got that long, laborious Ph.D., toiled and fumed through assistantships, through books few if anybody would read, through the academic mill to tenure . . . Only one other class of females were more put-upon—the wives of students; the wives of *medical* students. His first wife had been one. . . Had Professor Graham achieved tenure? Dr. May did not know. He hoped so.

He had gone on with a rather technical discourse upon the condition of the patient. He won-

dered, uneasily, whether Mrs. Graham heard, and if so, understood or really cared. She would want the essence, the end—what of the future?

And—of course—she interrupted with a question: "We'll need your help, won't we doctor? In making the adjustments? The children especially—how can we make them understand the change?"

"Change, the change, yes," Dr. May said, having expected such a question, but unprepared for it. "Yes, his appearance will no doubt be a problem. We would have liked to match appearances, but the opportunity arose so abruptly, it was such a *perfect* opportunity, it met all our criteria, just when we thought ourselves ready for the procedure . . . we simply went ahead, with the permission of the patient and the wives, of course. But surely you understand, yourself, Mrs. Graham, and your children will somewhat, that the *person*, the *character*, the *personality*—the thing that we call by name, John or Joe or Sam or Mary, is carried about in the brain. The body is an appendage, really, a mechanism that merely supports the brain, even as the brain controls its activity. Of course there are certain physiological functions that are performed independent of the brain, at least in part. Some of the bodily processes, you know, continue on for a period after the brain has ceased to function. But it's in the brain that we learn, remember, know, generate our emotions, and really, Mrs. Graham, have our being. The brain thinks, therefore it is, to paraphrase. The body does not think, and is therefore nothing at all. It merely functions physiologically and biologically. The brain is where we live."

Again he wondered if she was listening to him. Her eyes were remote, misty gray; they sought a distance and a depth in his eyes, something perhaps hidden there.

"What we're really talking about is identity, isn't it," she said.

He nodded, uneasily, trapped in an alley he did not care to explore further. "Yes, I suppose so," he said. "And identity is a complex centered in the mind, bound in fact by the boundaries of mind—and for our purposes mind and brain are the same."

"But it's not entirely a physical problem, is it? What is man? Isn't that the real question?"

"What is *a* man? Doesn't that say it better?"

"In a specific case, yes, if you're trying to identify a stranger, but to solve the specific we must often explore the general."

Dr. May stirred in his chair. Sometimes bright, educated women still upset him. One still hardly expected abstract discus-

sion from a female . . . "But what we have here, Mrs. Graham," he said, "is a specific case. That's all I can discuss with any certainty."

"I know. The scientist distrusts and rejects all philosophical speculation and guessing. It's so dreadfully *un*scientific." There was a trace of gentle, mocking scorn in her voice now. She was tougher than he had thought. He studied her eyes—the mist shifted, darkened, lightened . . . He began to admire her. "But will you help tell my children, explain to them?" she said. "Perhaps before they see him for the first time? Help prepare them?"

"Perhaps Dr. Oxford could help . . ." And perhaps not. Probably not. Dr. Oxford by that time would have performed other surgical operations, might have pressed on to other frontiers, might have simply lost interest, would certainly retreat in dignity and scorn from any mystical discussion of identity. "Mrs. Graham," Dr. May said, "we'll do all we can to help you."

"Thank you, I'm sure you will," she said. "The chance, the opportunity, the *thing*—it was presented so suddenly, I acted so quickly, I'm not prepared . . . But is there any doubt *he'll* accept *us*? Or that the other . . ." She paused, and looked out a window, into the late sunlight. "That the other wife will surrender—" Again she paused. "What a pity for her. How sorry I am for her. Her dilemma must be as acute as mine. Perhaps more so."

Dr. May didn't want to go into *that* just now. "Mrs. Graham," he said, "I'm sure that everything will work itself out just right."

"And that's precisely the general, avuncular, meaningless answer that I did not want. And perhaps it's all you can say just now. Right?"

"Yes, Mrs. Graham, it's all I can say just now."

"In candor, Doctor," she said, looking boldly at him with eyes suddenly a little hardened, the gray a little flinty now, "he was so dreadfully sick for so long—or his body was, if you prefer—that I was willing to try anything. And I must also admit that I was curious. The idea interested me intellectually. I have my degree in biology, you know."

He left her sitting in the sunlight, gazing out through a window.

A small, thin, carved face the color of an olive in a martini appeared above the patient. Just off its right ear hung a soaped brush, in a small, bony hand. How pleasant, said the patient to himself They're going to shave me.

He felt the lather, warm and faintly tickling, spread upon his cheeks, jaws and chin, a pleasing

sensation, evoking the sounds and odors of the barbershop and his own bathroom. The little man worked quickly and with many rapid movements. He drew back to inspect his handiwork, as an artist might withdraw from a canvas. He nodded, and his eyes were happy. Delicately, with tiny movements, he soaped the upper lip, and once more inspected, head tilted, little fingers delicately curved. He vanished—was quickly withdrawn, as by an outside force, through the arched perimeter of vision—and as quickly reappeared, a straight razor now held in his right hand. The patient regarded the blade—gleaming, flawless, a splendid line of steel and light at right angles to the line in the ceiling. Again he wondered, how can I see so well without my glasses?

The barber clamped his lower lip beneath his upper teeth, bent and with a slow flourish drew the razor the length of the left cheek. The patient heard the blade strike through beard—a continuous, hard grating like sandpaper upon wood. Something amiss here. The patient frowned in perplexity and alarm. Something wrong. What? The blade searched the point of his left jaw, beneath the ear—again that noise of sandpaper . . . But I have a very light beard, the patient said to himself. This sounds like the shaving of a boar. Yes, that was it—that something amiss. The patient closed his eyes. He labored through thought to reason; the simplest of problems baffled and exhausted him, these days. Yes, he had not shaved in several days. So perhaps his beard would only *seem* hard.

He opened his eyes, in relief, again with a faint physical pleasure in the attention being given his face (hospital did have advantages and pleasures, as every patient learned). The barber, sweating through the pores of an olive, labored too, the steel delicate and certain upon flesh of cheek, jaw and chin. But then he drew himself back, looking in astonishment at the mound of soap upon his blade. It was flecked with bits of black and a tiny red dot—soot and blood on snow. "Ah," the barber said, "I am so sorry. But that scar on your chin, sir, there toward the left . . ."

Scar? What scar?

"It is puckered up there at the bottom," the barber said, shaking his head. "What a shame. Some surgeon or other, sir, did a poor job. I'm sorry I cut you, but it's not my fault."

He bent again to his task, finishing the corners and crevices. He wiped the patient's face clear of soap and applied a liquid that was both cool and stinging. On the patient's chin, to the left, a tiny, intense flame sprang into

life. The barber extinguished it with the point of a styptic pencil. "Ah," he said, withdrawing, "there, nothing serious, sir."

"What'd you just do there?" demanded another voice.

"Only a little nick," the barber said. "I stopped the bleeding."

"It's been a long time since barbers practiced medicine. If any medication is required, we'll administer it."

"But just a little—"

"Oh, get out, just get out."

Sounds of movement, of implement against implement, of departure—and another face above the patient's, beneath a nurse's tiny white cap. Round face, fat, lined, freckled, ruddy, and really a little fierce.

"Stupid barber," it said. "Did he hurt you?"

She spoke as to a child. The patient frowned. He didn't care for motherly nurses.

"Do you know?" she asked. "Operated on only yesterday, and tomorrow already you'll see your family."

Family. Deep stab of guilt. He had forgotten them. Completely. Utterly.

"Won't you be glad to see your wife and children?"

But at the moment there was another question to ask.

"Tell me, nurse," he began.

Her face opened in amazement, like a large, ungainly, pulpy flower.

"Tell me, please, is there really a scar on my chin?"

"Why, Mr. Graham, you're talking, your first words . . ."

"But the scar, the scar. Is there a scar on my chin?"

"Yes, Mr. Graham, of course there is. And the barber cut it, awkward man."

"But there can't be."

Amazement faded from the countenance above his. It folded in upon itself—flower of evil, thought the patient—and then it opened once more, this time with the creases and planes and gaped mouth of unwanted, unwelcome comprehension. "Oh, dear," whispered large, pulped Venus-flytrap lips, "oh, dear, what have I said?"

The face withdrew. The patient heard the scurry of hasty departure and arrival, as of small frightened animals in the dark. He lay still, eyes closed, in wonder and beginning alarm. Tough beard. Scar. And something else. He labored to remember, and almost despaired. But yes—yes. Glasses. Cigarette. Yes. And still something more. Yes. Something. Yes. Voice. He heard faint sounds, from people gathered about him. "Nurse," he called, in a voice alien to his ears, "nurse! Please!"

"She went to a lawyer, the police, and a priest," the cop said.

"In that order?" Dr. Oxford asked.

"John, please," Dr. May said, turning impatiently upon his colleague.

There was a moment of silent adjustment and accommodation. The cop—a detective, one of the new sort of police officer, comparatively well-educated and incorruptible, no doubt thoroughly computerized—spoke with the spurious confidence and jolly cheer of a television announcer. He stood; his hosts sat at Dr. May's desk. A second officer hovered in the background; he remained a silent shadow that Dr. May never did see clearly. Nor did he ever learn the name of the talker. The omissions seemed appropriate, if a little awkward.

"In that order, yes," the cop said, nodding and smiling. "And they all have their questions."

"There are certain conventions and laws," Dr. Oxford said. "You must know that the relationship of physician and patient is confined and privileged."

"Of course. But you yourself must know that the relationship has boundaries. It's altered or even ended when crime is involved."

"Crime?" both doctors exclaimed. "What crime have we committed?" Dr. Oxford demanded. "We performed a surgical procedure, nothing more. This is a private hospital. We operate our own surgery. No Big Brother is watching over *us*."

"It seems to me, sir," said the cop, "that you yourself are a Big Brother, of a sort." He raised a silencing hand against Dr. Oxford's beginning protest. He was still the announcer; in pear-shaped tones he would cry disaster, and smile and smile and smile. "But never mind. I was referring to a crime that we know was committed. Or think was committed. Murder. One Paul Marshall was shot in his own living room, early yesterday afternoon. But first a by-the-way: How could you use him? Didn't the bullet do considerable damage?"

"It entered at the temple," Dr. Oxford said, with scornful patience. "It was small-caliber. It did remarkably little damage to the skull, and the victim lived long enough for our purposes."

"I see. Then to continue: His wife was outside at the time, with the children. She is completely exonerated. The neighbors seem to be too. Then who? Well, sirs, we have picked up a man on suspicion of murder. Before we can proceed further, however, we must know certain things. They involve medical facts, sirs, that perhaps only you can give us."

Dr. May fumbled for a name to call this man. Every man needed a name, a tag, a handle . . . Without one, he began, "Sir," and paused, and continued, "before we proceed, perhaps it

would help us if we knew something more about this one Paul Marshall. We know his medical history but not much about his personal history."

"This one Paul Marshall, sirs, lived a bit in the shadows," the cop said, smiling as with vast and delighting satisfaction. "He was at one time a professional athlete —basketball, I believe—but for several years he had operated a small contracting firm that dealt primarily with the city. In Chicago, that in itself casts certain shadows, doesn't it? We have the world's greatest medical facilities, and perhaps also—who can say what else? At any rate, he made a good thing of it, in a middle-class sort of way, and might even have accumulated a small fortune but for two failings. He gambled heavily, and he drank heavily, and so he always lost. And the people he gambled with are very fussy about debts. They like to collect them. And they always do, in one way or another. In this case, teach one defaulting debtor a lesson, and others get the moral. You see?"

"Are you guessing, or stating facts?" Dr. Oxford asked.

"The man we have in jail is a minor member of the syndicate, sirs. One of their muscle men."

"One of their executioners?"

"If you prefer."

"Then charge him, and leave us alone."

"Unfortunately, sirs, it's not that simple. Before we can bring a charge of murder, we must first produce a murdered body. Where is the body of one Paul Marshall?"

Doctors May and Oxford looked at each other, with identical expressions of dismay that faded slowly into distasteful and alarming comprehension.

"You see, sirs?" The cop spread his arms wide. His smile lengthened. "I believe you have the body here."

"Yes, of course," Dr. May said, sensing the apparent absurdity of what he was about to say, "but it's not dead. It's alive."

"You restored it to life and health? You resurrected it?"

"In a manner of speaking we did," Dr. Oxford said, with sudden pride, even gloating. "You put it very nicely, officer, for a layman."

"Thank you, sir. And I congratulate you. No doubt you have made medical history."

Dr. May opened his mouth and raised a hand, to sound a warning, but Dr. Oxford went on with a certain hard, bright joy: "Yes, I think we have, and much labor was involved, I assure you. I transplanted a thousand mice, and five hundred guinea pigs, and fifty monkeys, before I was ready for what we did yesterday."

"Ah, yes, practicing, eh, sir? Working your way up the ladder of life to man?"

"Of course. That's the customary way."

"But we still have our problems, don't we, sirs? You have a living body, I believe, that bears the wound of a gunshot, and you also have another body, a genuinely dead one. Is that the case, sirs?"

"I assume that that body's been delivered to an undertaker," Dr. Oxford said, diminishing a little. "That's the usual procedure, I believe."

"And what shall we do with that body, sirs? What is it? Who is it? What name will you give it? Whose funeral will be conducted? What name will you put on the gravestone? These are the questions of the priest, sirs."

"Well, let the priest answer them then," Dr. Oxford shouted. "They don't concern us."

"But more, sirs: Whose family would attend that funeral? Which wife would grieve, which set of children realize that they are orphaned?"

"Oh, now, really, I assure you, we don't trade in the debased currency of dogma."

"Debased currency, sirs? Really, now. We refer not alone, perhaps, to body and brain, flesh and bone, sirs, but to a soul."

"Oh, my God," Dr. Oxford breathed, snorting and flinging his head like an outraged horse, "must we put up with this nonsense?"

"I'm afraid you must, sirs, because of the next question. That man in jail, sirs, assuming that he fired the shot—did he kill anybody?"

"Of course he did," Dr. May said.

"Whom did he kill, sirs?"

"Paul Marshall, of course."

"But the body of Paul Marshall still lives."

"His brain died. He died with it."

"So one family will now have a husband and father with the body of a stranger, and the dead body of that husband and father is now something nameless and soulless, to be thrown away without ceremony. And we will conduct a funeral over a deceased brain, a widow and three orphans will mourn that brain, and on the headstone we will engrave—"

"Oh, come now, man," Dr. Oxford said, shouting again, "you've had your little joke. What do you want from us?"

"A signature on a death certificate, sirs. That is all, at the moment."

"You'll get it," Dr. May said. "You always have, and on time too."

"And what name will you use for the deceased?"

"Paul Marshall, of course, and don't mention the body again, please. The body is nothing."

"Ah," the cop said, smiling, "but it is obviously something—

matter, you might say, for the courts to contemplate. They'll be chewing over this one for years, won't they, they and the armies of the lawyers? Won't they have a merry old time of it, though?"

"Perhaps you should consult the hospital's lawyers, not us at all," Dr. May said.

"We will. Oh, we will, I assure you, no doubt many, many times. Perhaps you should have done so yourself before you proceeded."

"And I assure you that we did. They drew up the releases and consents, they guided us at every step, they approved every one."

"I hope that in the days and months and years to come, sirs, you will find their presence and their counsel continuingly helpful and comforting. They do have quite a question, you know. They and the state's attorney—Ah, yes, the state's attorney. Can you imagine presenting this case to a jury of our peers? Ah, well, that's his problem. Now there's one more thing I will say to you, just between you and me, a thing I pass on to you out of interest in the case, out of goodwill even. About Mrs. Marshall's lawyer and *his* questions. He has obtained a court order for the widow—if widow she is—you will be forced to permit her to see that living body whever it may be."

"What idiotic judge," Dr. Oxford began, but was waved to silence by Dr. May.

"We can't permit this," he said. "And we weren't consulted about it."

"Certainly you were, sirs, through your lawyers. Your lawyers were in court. There was a telephone conversation, I believe. I believe that Dr. Oxford said that of course he could be seen."

Dr. Oxford stiffened and flamed. "But I didn't mean *them*," he shouted. "Certainly *they* can't visit him."

"I'm afraid they can, sir."

"Oh, for God's sake," Dr. Oxford breathed, sinking and dimishing in his chair.

"John," Dr. May said, in weary exasperation, "you did this? You were so proud that you couldn't admit the patient shouldn't have visitors?"

Dr. Oxford sank deeper in his chair, a drowning man.

"Yes, sirs," said the cop, smiling on them both. "Mrs. Marshall and her three children will be admitted to the room tomorrow morning at eleven o'clock. And one more small thing, sirs, if I may. I don't know how the syndicate, the mob, if you will, is going to feel about your achievement. They may not be entirely happy about your frustration of their handiwork."

"They wouldn't dare!"

"You will be protected," the cop said, bowing and smiling, and motioning to his shadow. They went to the door. "The death

certificate, sirs," the cop said. "Never forget that, and the name to put on it."

They went out. The two doctors sat in isolated silence. Dr. May sighed again. He stole a glance at his distinguished colleague. His distinguished colleague was now a bent man, his face clouded, broken and aged. Dr. May began to smile, in understanding and fondness, and looked away. At least the thing had one small compensation: Dr. John Oxford had been winged; he had been shot down in full flight. He would recover, in time, and restore his arrogance and vanity to their former vigor, luster and brass. But at the moment, Dr. May said to himself, smiling, his good and difficult friend had become a child. Perhaps he had always been a child.

The patient felt himself weightless and timeless in his drifting, wanderings, and brief stopping. Time passed, long or short, he did not know, and did not care. He roamed insubstantial, incorporeal, from small island to small island. At the moment he lay on one of those small islands and contemplated his toes. Or rather, the two points they made, far away. Infants studied their toes. Except as ye become a child again. He would move a toe. He thought: Move, toe. Nothing moved. With the same labor and pain he exerted in trying to think and reason, he willed movement, far away, down an expanse of white. At last there was a stir, there on the right, and at the end of his big toe he felt the not unpleasant abrading of fabric. He was pleased. Recuperation would no doubt be timed and recorded in just small and magnificent accomplishments. A toe, a finger, a foot, a hand. Move. Both toes stirred beneath white. His left forefinger shifted laterally, and then, with miracle movement, curled and uncurled. *Le sommeil est plein de miracles!* Translate, please. Waking, too, was full of miracles. He was beginning to be glad to be alive—or aware that he was glad to be alive. No doubt he had been glad all along. Who wouldn't be? Thank God the person—the body—didn't surrender without resistance.

He was hungry.

He wanted a cigarette.

He would even like a drink.

He took water by drawing upon a bent plastic tube.

Sighed.

Regarded his toes again.

Wondered: Toes so far away, across a tube of snow. Too far away. Bed of Procustes. Stretched. Now fitted. Short man, now tall man. Had sometimes resented his shortness; rather, resented overbearing heights of others. No problem now. But how? Impossible. Of course. Dream. Reve. *Plein de miracles.* But day of miracles ended.

Cigarette, beard, scar, eyesight, voice. Now impossible distance to toes. Tired now, weary. Think it over tomorrow. Ask Elizabeth. Family. Tomorrow, Elizabeth, Little Elizabeth, Dan Junior, ask them all.

"It's Jennie, Paul."

He looked up into a thin, strained face beneath absurdly blonde hair.

"Don't you know me, Paul?"

"For God's sake!"

"The woman's insane. How could he know her?"

Two strange voices, alarmed and outraged.

The woman's face vanished. He heard a shout—her voice—"Shut up! Just shut up and leave us alone, give us a chance!"

Her face slid again into the tube of his vision. The eyes were bright blue, and moist with tears; the lips thin, covered by smeared, cracked lipstick. "It's your wife, Jennie, Paul, please," said the lips. "Please say you know me."

He shook his head.

"And the children—come here, children, see your father."

Three small faces appeared, one after the other. Small mouths said, "Daddy."

The patient was perplexed, but amused. Jokes on fathers who did not know their own children. Who would play jokes now?

"It's not funny," he said, clearly, in his strange voice.

"You hear?" shouted the cracked lips. "You hear him? It's *his* voice, *his voice.*"

"Please, please," cried a male voice new to the patient, "you must not upset him this way."

Another voice: "Listen here, now, Doctor, don't you interfere with the court's order."

"But they're endangering the life of my patient."

"Just cool it, doctor, I'm warning you, just cool it."

The woman's face stared down into his. Clearly demented, she was; he pitied her, sorrowed for her, and wished she would go away. Tears fell from her eyes; they grew as they fell, swelling, inflating globes that frightened him, and struck with tiny impact upon his cheeks, and tickled slightly, like the barber's lather, as they rolled down the slopes of his face.

"I'm sorry," he said, aloud, sincerely and sympathetically, "but I don't know you, ma'm."

Ma'm. Child's word. Except as ye become a child.

"But please, Paul, please, Paul, Paul—"

The woman wailed and wept, covered her face with her hands, and went away.

Long darkness, chasm in life, vacuum in time.

He became aware of tubes and wires, and the doctors and nurses always in the room. Intensive care. He knew the word—he knew *it*—from other times in hospital. Could like hospital, often did: No

tasks, no responsibilities, pleasant tactile sensations. But slowly he wondered: What outrage have they committed upon me this time? No answer, yet, of course. Ask later.

Now, Family. When could he see his family?

"Soon," said a voice, answering a question he did not know he had spoken.

Elizabeth. Dan Junior. Little Elizabeth. Soon. Soldier returning from wars. Ship and plane move slowly, so slowly, would get out and push, if one could. Yet sometimes—where read? where known?—returning soldier and welcoming family were strangers to each other. He reasoned, slowly but now easily: Both changed; soldier, family, all older, had separate experiences, made new alliances and allegiances, altered all shadings of relationship. Different man returned, to different people. The former man might never return, really, never find the former people. Earth always moving, never twice occupying the same space in the universe. *Chaque ilot signale par l'homme de vigie Est un Eldorado promis par le Destin.* Translate, if you will. *Each island signaled*—no, not quite *signaled,* but indicated, *pointed out*—another false cognate . . . *Each island indicated by the watchman Is an Eldorado promised by Destiny (Fate).* Splendid poet. Ought to remember his name. Escapes me now. Sleep, now, name will come.

A remembered face looked down into his.

Name is Baudelaire. How could I forget?

"Elizabeth," he whispered.

This face too was withdrawn. He lived in a world of appearing and disappearing faces. Cheshire cat faces. But Elizabeth's should stay put.

It returned. He whispered her name again, and she his. And the two children—silent and round-eyed with awe and embarrassment and perhaps fright. Pleasure would return, some day, as it did for the returning solider, if he was lucky. Their names too he spoke. They should speak his. Dan. Father, Father.

"But I don't know him."

Daughter's voice. Little Elizabeth's.

"But the doctor told you, dear," Elizabeth said. "Don't you remember?"

"Is he really—?"

Son's voice. Dan Junior's.

"Yes, Dan, yes, yes, the doctor told you, remember?"

This face, Elizabeth's face, her eyes—they wept too, and went away.

Time, long again, dark.

A certain clarity, a day dawning.

Another face. Stout, ruddy, blue-eyed, beneath crew-cut gray hair; man's face, not seen before. Doctor.

"Doctor," he said, clearly again, in his new voice, "Doctor, tell me, what have you done to me this time?"

"A great deal, Mr. Graham."

"But what?"

"Don't you know, Mr. Graham?"

"I don't know, and I want to know. I have a right to know. I'm the patient, you see."

"Yes. You are the patient. And you don't remember? We discussed it with you."

"And I agreed?"

"You agreed."

"Don't tell me. Let me remember. It's a game I play. I never like to be told things I ought to remember."

Water again through a bent plastic tube. "Dat ole debil Oxford, what he done gone and done now," whispered a Southern voice. Change of bottles at bedside—change of guard—liquid food, flowing direct into flowing blood. No need to eat at all. What a lot of bother it saved, what a lot of cooking and dish-washing. Elizabeth never had wanted to be a housewife. Saved money too. Outrageous what they charged for groceries these days. The patient was amused, and then intent and laboring again. What had they discussed? what had they agreed? "Dat ole debil doc done gone and done it dis time," whispered the Rebel voice. There was a method in remembering. Think of something else, totally different. The answer would pop suddenly into view, eventually, from somewhere, from the subconscious, from that great sea of memory. He slept, and awoke with the memory, knowing.

Memory mobilized its hosts and marched them in slow pace, to muffled drum.

So my barber scrapes his razor through a strange hard black beard.

So I who never smoked now want to smoke.

So I who was short am now tall.

And I who never felt a wound now have a scar at chin, a scar at temple.

And I speak in a voice I never heard before.

And if I could see the face now mine, I would know it not.

I see another face and know it not, though it knows the face now mine.

I see still another face and know it, though it knows not mine.

So to one women I am husband, to another stranger.

And this body now mine is husband and father of strangers.

And stranger to a woman and two children who are mine.

Physically the creator of some; in mind the creator of others.

Who is my wife, who my children?

Whose husband am I, whose father?

Who am I?

False cognate.

What is man? Freak.

The patient was again amused. They had once more outsmarted themselves, and mankind. He had done it again, dat ole debil: At last established the insubstantial and irrelevant nature of man's identity.

In his amusement the patient said They have been problems to me, now I will be a problem to them. He said I don't want this, any of it. With purpose and overpowering will, quickly this time, the patient moved his hands, ripped out wires and tubes and tore away strips of bandage, climbing and turning rolled himself off the bed to the floor, and then at the end of a long white corridor, beyond a ground-glass door, entered into a profound and endless dream.

Bill Pronzini is a young and talented writer who has been published in most of the mystery magazines. His debut in the fantasy field is the amusing story of a millionaire who collected freaks, but not in the manner of P. T. Barnum. Fensterblau was a serious collector who wanted nothing but authentic stuff, like a candy-striped piranha, a marmoset that snored and, maybe, a talking Kodiak bear.

THE SCREWIEST JOB IN THE WORLD

by Bill Pronzini

FENSTERBLAU WAS FEEDING sirloin tips to his candy-striped piranha when Grodnik, the three-legged butler, let me into the walnut-paneled study.

"Ah, Elroy," he said, looking up from the tank and adjusting the Ben Franklin glasses perched on his nose. "How are you, my boy?"

"Hungover," I said.

"Blonde or brunette?"

"Redhead."

"Youth," Fensterblau said, sighing wistfully. " 'Bliss was it in that dawn to be alive/But to be young was very heaven.' "

"Shakespeare?"

"Wordsworth."

I cleared my throat. "What do we have this time, sir?"

"A trapper named Oglethorpe in Alaska," Fensterblau said. "He claims to have a Kodiak bear that talks."

"How's that?"

"Talks."

"A bear?"

"Correct."

"Just talks?"

"Just talks."

"Like a parrot?"

"No, intelligently."

"Oh, hell," I said mildly. "Six weeks ago it was a guru in Marakesch with a tapir that recited Shelley's *Prometheus Unbound* verbatim from memory. And before that, it was a guy in New South Wales with a singing spider. Neither of *them* panned out. I found a transmitter surgically implanted in the tapir's throat, and the nut in Wales swore up and down his spider had acquired a case of laryngitis two hours before I got there. That's the way it always is with these talking animals and things."

"Nevertheless, Elroy, there is always the possibility that one such report of this type will prove to be genuine. We must not allow a single one to go uninvestigated."

"If you say so, Mr. Fensterblau."

"I have wired Oglethorpe to expect you sometime tomorrow," Fensterblau said. He scuttled to his massive mahogany desk; the way he moved had always reminded me of a fiddler crab. From a drawer he produced a thick envelope and extended it to me in one veined claw. "Here are your plane tickets and a thousand dollars for expenses."

"How much should I offer this Oglethorpe if the bear should check out?"

"Half a million."

"Isn't that a little steep?"

"For a talking bear?"

"Well," I said, "it's your money, Mr. Fensterblau."

I left San Francisco International on the midnight flight for Seattle. During the trip I drank three martinis, made an unsuccessful pass at one of the stewardesses, and thought about what a damned screwy job I had, working for old Phineas T. Fensterblau.

He was on his tenth or eleventh million—land speculation or the stock market or something—and he was an eccentric in every sense of the term. He had two consuming passions in life: poetry and freaks of nature. In his extensive library, he had over a thousand volumes of poetry—a good number of which were first editions—and he employed representatives in a dozen cities across the globe who did nothing but scout used book dealers, Salvation Army Thrift Stores, bargain basements and private collectors. He had three times as many representatives prowling about in search of Mother N.'s quirks.

That was where I came in. As soon as he received a report of a new and different kind of oddity, he would call me in and I would proceed to wherever it was and check the authenticity of the discovery. Of course, ninety per-

cent of them were either crank-oriented or elaborate hoaxes; word had spread rapidly about the prices Fensterblau was willing to pay for a genuine article, and you'd be amazed at the amount of trouble people were prepared to go through for the prospect of a hundred thousand dollars on up. Every now and then, though, I would come across an honest-to-Christ curiosity. Like the candy-striped piranha, a marmoset that snored, a tree that grew apples on its lower branches and figs on its upper ones, and—although Fensterblau refused to accept it as a natural freak—a dog that walked only on its front paws as a result of having had a voodoo curse put on it by a Haitian *ouanga*. . .

Fensterblau's palatial San Francisco estate reminded you of a carnival sideshow as a result. As I said, he's an eccentric; he likes to surround himself with strange and unique things. And people. Take, for example, Grodnik, the three-legged butler; or Elena, his upstairs maid, who is as bald as an ostrich egg; or, for that matter, me.

I doubt very much if I would have gotten this damned screwy job of mine if it hadn't been for the fact that I was born without any ears.

The flight to Seattle took an hour and a half. I waited for thirty minutes there and then caught an Alaskan Airlines jet to Anchorage. That took three hours —or one hour if you want to consider the time differential. There was a two-hour wait in Anchorage, and then I caught another plane to Fairbanks; that took another hour. Computed, all of this means that I reached my ultimate destination in the middle of a blinding snowstorm at six o'clock in the morning, Alaskan time.

According to the directions Fensterblau had included with my plane tickets and expense money, this Oglethorpe lived approximately halfway between Fairbanks and the town of Circle on the Yukon River, in a semi-isolated cabin ten miles from the highway. From the airport, I took a taxi into Fairbanks and woke up a man named Kellen, who rented me a covered jeep, a set of snowshoes, a back-pack and some fur-lined clothing. I drove 52.8 miles northeast, through rolling, wooded hills, parked the jeep in a stand of poplars off the road, made a mental note to tell Fensterblau to deduct five percent from Kellen's fee because of the machine's defective heater, put on the back-pack and the snowshoes with blue fingers, and set out across the frozen white wastes in the general direction of Oglethorpe's cabin.

Five years, one moose, a pack

of grayish-white wolves with yellow eyes, two snow flurries, and a frozen fanny later, I stepped off one of the tussocks of high, rough ground and buried myself alive in soft snow. I fought my way to the surface, spitting and yelling things.

A girl's voice said, "Really, such language."

I rubbed my eyes clear. She was standing off on my right, dressed in a hooded parka and wearing snowshoes similar to mine. She carried a .20 gauge shotgun under one arm. "You ought to be more careful in the muskegs," she called over the wind. "Some of the snow pockets are even deeper than that one."

"Sure," I said. "What's a muskeg?"

"In the summer, they're marsh areas with standing water in the low areas," she said. "But the snow piles in there at this time."

"Maybe I should have read some books," I said, struggling through the snow until my feet touched solid ground near her.

"You're Mr. Fensterblau's representative, aren't you?"

"Uh-huh. Roy McNeil."

"Well, I'm Christina Oglethorpe."

"Wife?"

"Daughter."

"My pleasure. How far is your cabin?"

"About a mile or so," she said. "We'll follow the trap line."

We tramped carefully through the snow, Christina leading, and finally came upon a packed path which seemed to lead in a wide circle. Here and there along it I saw the baited traps. "What do you trap?" I asked her.

"Pine martens, minks, and the like."

"Is there any money in it?"

"Not a great deal."

I could see very little of her face beneath the heavy hood of the parka, but her voice was soft and cool. I wondered how old she was, and what she looked like, and what her opinion was of men without any ears.

After a time we came in sight of a small cabin set into a ring of blue spruce. It was constructed of raw unfinished sawmill planks and covered with tar-paper for insulation purposes. Smoke curled upward from a stone-and-mortar chimney on one side. The door opened when we reached it and a grizzle-bearded old bird wearing a plaid lumberman's jacket and high boots stood there. He had watery blue eyes and a crooked nose and fulvous teeth. He looked me up and down like an undertaker measuring a potential customer.

Christina said, "Papa, this is Roy McNeil. He's Mr. Fensterblau's representative. Mr. McNeil, this is my father, Sam Oglethorpe."

The old guy made a grunting sound and put out his hand. I

shook it. "Wet," he said laconically.

"I fell into a snowbank."

"Dry off," he muttered, stepping aside.

Christina and I went into the cabin. The walls were tarpapered inside as well, and the studs were exposed. There was an iron, pot-bellied wood stove in one corner and a Colman pressure lantern in the middle of a bare wooden table. A kerosene stove, of the two-burner variety, reposed next to a homemade tin sink in a wood frame; a coffee pot sat above a low flame on one of the burners. Through an open doorway I could see two sets of bunk beds, each double-tiered.

Oglethorpe pointed a knotted hand. "Stove," he said.

I went over to the pot-belly and stood with my numbed rear end to it. Christina took the coffee pot off the burner and poured inky liquid into a pewter mug. Oglethorpe looked in my direction. "Drink?"

"I don't mind if I do."

He found a large Mason jar and splashed some of its clear contents into the mug. Christina brought it to me and I drank a little, coughed, recovered my breath, and said, "Very nice."

He put the Mason jar away. Christina removed her parka. Long black hair tumbled down over her shoulders; her eyes were green with little yellow flecks in them, and her skin was so pale it was almost translucent. She was a little thin here and there, but not at all bad if you happen to like the Morticia Addams type. I don't, particularly, and I was somewhat disappointed.

I removed my own parka and back-pack. Oglethorpe's beard wiggled. "No ears," he said.

"Papa, don't be impolite."

"Not at all," I said.

"Born that way?" Oglethorpe asked curiously.

"Uh-huh."

"Hear okay?"

"Directionally," I said. "Like radar."

"Damndest thing," Oglethorpe said. He poured himself some coffee.

I finished what was in my pewter mug. Between that and the warmth from the pot-belly, I began to feel thawed. My feet were tingling. "About this talking bear of yours," I said.

"Bruno," Oglethorpe said.

"If that's its name."

"Yup."

"How did you acquire it?"

"Papa was out walking his traps one day several months ago," Christina said, "when he found Bruno in one of the muskegs. He was just a cub and there was no sign of his mother, so Papa brought him home as a sort of pet."

"I thought Kodiak bears came from the Aleutians."

"They do."

"How do you suppose this one got here?"

"We've been puzzled by that, too."

"When did the bear begin to talk?"

"About four months ago."

"What was the first thing it said?"

"Papa."

That figured. "What was your reaction?" I asked Oglethorpe.

"Damndest thing," he said.

"And yours?" I said to Christina.

"Surprised, to say the least."

"Uh-huh," I said. "Well, can I have a look at this phenomenon?"

"Of course," Christina said. "We keep him in the storage lean-to around back. He's very tame."

We went outside and around to where a slant-roofed lean-to had been built onto the rear of the cabin. Oglethorpe opened the door and we entered. There was no floor to speak of, and it was like a meat locker in there. Which was part of its purpose, I noted. There were slabs of venison, frozen solid, hanging on hooks from the low rafters, and at the rear were piles of stretched, frozen animal pelts.

The bear was sitting with its back to one of the side walls, leaning forward with its front paws resting on its hind paws. It was a young Kodiak, all right, just into puberty—if that's the right word. Its brownish coat glistened with ice crystals.

"Bruno," Oglethorpe said.

I walked over to the bear and looked down at it. It raised its head slightly and met my eyes. There seemed to be a certain intelligence in its gaze.

"This is Mr. McNeil, Bruno," Christina said to the bear. "He's the man we told you about."

Ponderously, the bear gained its hind paws. "Nice to meet you, Mr. McNeil," it said in a growling, but friendly, baritone.

I had long ago ceased to show surprise at anything I encountered in the course of my job. I kept my face stoic and said gravely, "How do you do, Bruno?"

"Very well, thank you," the bear said, sitting down again in the snow.

I looked at Christina and Oglethorpe; their faces were expressionless. I said, "I'd like to have a few minutes alone with Bruno, if you don't mind."

"Of course not," Christina said.

"I'd appreciate it if the two of you would vacate this general area entirely. Possibly you could check the trap line or something."

"Already have," Oglethorpe said.

"Come along, Papa," Christina told him, taking his arm. She led him around the side of the cabin

and inside. I went to the corner and waited. After a moment, the two of them came out bundled in parkas and trudged off along the path toward the trap line. I watched them until they were out of sight and then I went back into the lean-to and approached the bear.

I said, "Talk to me, Bruno."

"What would you like me to say, Mr. McNeil?"

That appeared to rule out ventriloquism. "Would you object to standing up a minute?"

"Not at all," the bear said. It got to its hind paws again, just as ponderously.

I said, "Lift your head, please."

Obediently, the bear lifted its head. I ran my fingers, swiftly and surely, along the bear's throat, under its chin, beneath the ears, around the snout. No transmitter. I poked Bruno here and there on the torso.

"Why did you do that, Mr. McNeil?"

"Just checking," I said in a noncommittal way. I had investigated a report a year or two ago, in which a pair of brothers in Port Said claimed to possess a large chimpanzee who had the ability to whistle the closing aria from *La Boheme*. By prodding and poking, I had discovered a midget carefully concealed inside the monkey skin and exposed the whole thing for the hoax it was.

But the Kodiak seemed to be a real bear, all right. Nevertheless, I still wasn't satisfied; at the annual salary Fensterblau was paying me, I would not be satisfied for quite some time yet. I said, "All right, Bruno. You're supposed to be intelligent. Name the man instrumental in the purchase of Alaska from Russia in 1867."

"William Henry Seward."

"Who was the twelfth President of the United States?"

"Zachary Taylor."

"Give me an example of a marsupial."

"A kangaroo."

"Who was Henry Miller?"

"A writer of children's books."

Well, I thought, three out of four isn't bad. "How did you acquire your knowledge, Bruno?" I asked.

"Miss Christina reads to me."

"Encyclopedias?"

"Among other things."

"How is it you're able to talk?"

"I don't know."

"You don't have any idea?"

"No," Bruno said. "I remembered hearing Miss Christina and Mr. Sam converse in my presence, and their words seemed to have meaning for me. One day I was very hungry, and Mr. Sam was cutting down some meat for supper. I wanted to tell him of my hunger, and so I called out to him, as I had heard Miss Christina call out to him before."

"Papa?"

"Yes."

"Uh-huh," I said. "Do you know how it happened that you came to be all alone in a muskeg near one of Mr. Sam's traps?"

"I can't recall," the Kodiak said. "Miss Christina says I was very young when Mr. Sam found me."

I asked Bruno a few more questions, learned nothing of further import, thanked it/him for its/his time and went back inside the cabin. Oglethorpe and Christina had not as yet returned; I looked through the single muslin-covered window and saw no sign of them. I then set about searching the cabin.

Fensterblau pays me for results, and results sometimes preclude completely scrupulous behavior. I went over the canned goods larder and the kitchen portion of the cabin cursorily, and then concentrated my efforts on the remainder.

In the hearth were some ashes and a blackened pot suspended on a steel rod cemented into the stone. On the mantelpiece was a rack filled with well-used pipes, a can of fresh pipe tobacco, a box of wooden matches, and a tarnished brass Justice scale. The papered walls were bare except for a large moosehead inexpertly mounted on a wooden oval near the hearth. There was an ancient footlocker on the floor against one wall that contained, among other things, a set of printed chinaware, a white linen tunic —its upper half a bright scarlet and its waist encircled with white silk—and a mahogany-framed picture of a tall, severe woman wearing an amulet that resembled a stone arrowhead. An old-fashioned trans-oceanic radio sat on a small stand opposite that; it wasn't operational. There was nothing else in the front room save for the table and chairs, the pot-bellied stove, a thick woven rug, and an old overstuffed chair with a penny and two nickels underneath the cushion.

I went into the other room. Each of the four bunk-beds was neatly made. There was an unvarnished six-drawer dresser, a makeshift nightstand with a kerosene wick lantern on it, and a set of wooden shelves containing a set of encyclopedias and several other books. I opened each drawer in the dresser, checked the contents carefully, and found nothing which interested me in particular. In the single drawer in the nightstand I found two pencil stubs, a yellowed tablet, some hemorrhoid capsules, and three tins of snoose. I looked through the books on the rack, skipping the encyclopedias; there were such fictional items as *Girl of the Limberlost* and *Little Women,* and a few non-fiction works on various topics. There was also an old photograph album mixed in there. I thumbed

through that slowly, replaced it in the same position, and then went out into the front room and stepped across to the window.

It was snowing, now, lightly, and Christina and Oglethorpe were on their way back; I could see them outlined against the white horizon in the distance. I poured coffee into the pewter mug I had used earlier and sat down at the table to wait.

After a minute or two, the door opened and Christina and Papa came inside, brushing snow from their clothing. I thought I saw what might have been a hint of greed in Oglethorpe's eyes when he looked at me, but Christina's voice was toneless as she asked, "How did you and Bruno get on, Mr. McNeil?"

"Oh, famously."

"Quite a remarkable animal, isn't he?"

"Uh-huh," I said. "Remarkable."

Oglethorpe sat down across from me. "Money?" he asked.

"Now, Papa," Christina said. "You mustn't be impatient. Mr. McNeil will get around to that in due time."

I smiled. "In due time," I agreed.

We had venison stew for supper, which Christina made in the blackened pot in the hearth. It was a little gamy, but otherwise not bad. Christina asked me, "Will you be staying the night?"

"If I can."

"Of course."

"You understand that I have to exercise a great deal of care in these matters," I said easily.

"Certainly, Mr. McNeil."

"Possibly tomorrow we can discuss an offer for Bruno on behalf of Mr. Fensterblau. A most generous offer, I may add."

Oglethorpe's eyes glittered. "More stew," he said eagerly, spooning a healthy ladleful into my dish.

After supper, Papa and I sat around the big pot-belly with a cup of his embalming fluid while Christina did the dishes. I lit a cigarette and he inhaled a good-sized pinch of snoose from a can he produced from his trousers. When Christina joined us, we made small talk about trapping and things until it was time to retire.

I slept very well, considering the boulder which seemed to be hidden in the mattress in my bunk.

After breakfast in the morning, I said, "I think I'd like to have another word or two with Bruno."

"By all means," Christina said.

I put on my parka and went outside and around to the lean-to. The Kodiak was curled into a ball on the icy floor.

"Good morning, Bruno," I said cheerfully.

Bruno regarded me sleepily. "Oh, good morning, Mr. McNeil." He stood up. "Did you want to talk to me again?"

"Why yes," I said. "I wanted to ask you a question."

"Certainly. What was the question?"

"I'd like your opinion on sorcery."

The bear seemed to stiffen. "Sorcery?"

"Uh-huh," I said. "Witchcraft, that type of thing."

"I . . . I don't really have an opinion," the bear said. There was a decidedly apprehensive note in the growling voice. "Why do you ask?"

I smiled. "No particular reason. Well, no matter." I started to turn and then stopped, as if I had just remembered something. "Oh, one other thing."

"Yes?"

"Does the craving for a good pipe bother you much, Armand?"

There was a moment of stunned silence. Then, behind me, Christina's voice said coldly, "So you know, do you, Mr. McNeil?"

I turned. She was standing in the doorway. Beside her was Papa and in his hands was the .20 gauge shotgun; he was pointing it at my midriff.

"Eavesdropping isn't very polite, you know," I said mildly.

"How did you find out?"

I shrugged. "You really should have been more careful in what you left lying around the cabin," I said.

She frowned. "I don't understand."

"Well, there was the rack of pipes and the can of tobacco on the mantelpiece," I said. "I thought they were Papa's at first, but then I found three cans of snoose in the nightstand drawer in the bedroom. A pipe-smoker never uses snoose, and when I saw Papa take a large pinch for himself after supper last night I knew those pipes couldn't belong to him. But they were well-used, and the tobacco was fresh; that meant somebody else had to be living here.

"Then there was the photograph album in your book shelf. There was one snapshot in it of you and a young, dark-haired man, taken some time ago, but taken in the cabin here. It was captioned: *My children, Christina and Armand.* What do you suppose old Armand was smoking in that snapshot?

"And finally, there were a couple of things in the footlocker I discovered. One was a white-and-scarlet robe with a silk girdle at the waist; while I'm not an expert in such subjects, I've had a little training—compulsory training, since Mr. Fensterblau is a very thorough man—in the history of sorcery and the like. I

recognized the robe as that type which was worn by enchantresses during the Middle Ages. As well, I found a photograph of a woman wearing an amulet that looked like a stone arrowhead; such an amulet was also the medieval British witch's staple. Am I correct in assuming that the woman in the photograph was your mother, Christina?"

"Yes," she answered slowly. "She died ten years ago. A most gifted woman."

"I'm sure she was," dryly.

"She was a lineal descendant of Oleana, who was burned at the stake for practicing black magic in the 12th Century. Papa married her in London shortly after the first World War."

"Damndest woman," Oglethorpe said with some degree of pride.

I said, "Do witches hand down spells like recipes from generation to generation?"

"Not exactly," Christina said. "I learned many enchantments from my mother, some of which no longer are workable today. Others, such as the one which temporarily transforms men into animals, seem to have lost something over the centuries. The first time I tried it on Armand, he became a unicorn, which is ridiculous for any purpose. I wanted him to be a grizzly, or at least an Alaskan brown bear, but when he came out a Kodiak on the second effort, Papa and I decided to leave well enough alone."

"Listen," Armand said, rubbing his snout with one paw nervously. "To hell with all of this. What are we going to do with McNeil?"

"Shoot him?" Oglethorpe asked, beard wiggling.

"Don't be silly," I said.

"I suppose I could change him into a moose," Christina said.

"What would that get you?" I asked. "Fensterblau won't pay a cent if I turn up dead or missing or transformed."

"You suggest we simply allow you to leave?"

"Naturally."

"Whereupon you will have us arrested for attempted extortion."

I shook my head. "I work for Phineas T. Fensterblau, not the police."

"You wouldn't go to the authorities?"

"Why should I?" I said. I put on my best smile. "Besides, this isn't the end of the world for you. There ought to be hundreds of ways for an enterprising young sorceress like yourself and a willing subject like Armand here to make nice sums of money."

Armand looked at Oglethorpe. Oglethorpe looked at Christina. She frowned for a moment, considering, and then smiled slowly. "Papa," she said finally, "put down the shotgun. Mr. McNeil would like to be on his way."

I called Fensterblau from a booth at the airport in Fairbanks and explained the whole thing to him. He was dejected, of course —he always was when one of the reports turned out as this one had —but he took the news with his usual good humor. He quoted:

Be still, sad heart! and cease repining;
Behind the clouds is the sun still shining;
Thy fate is the common fate of all,
Into each life some rain must fall,
"Some days must be dark dreary.

"Keats?"

"Longfellow."

I scratched my nose. "I'll be in to see you tomorrow, Mr. Fensterblau."

"Good-bye, Elroy."

On the flight from Anchorage to Seattle there was a young blonde stewardess who served me my first martini. She said that she thought my lack of ears made me awfully sensual-looking.

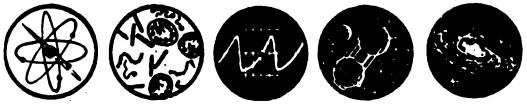
I was a day and a half late reporting to Fensterblau.

He was very excited when Grodnik showed me into his study. "Elroy! I'm glad you're here, my boy. I've just received a report concerning a scientist in the British West Indies who insists he has successfully crossbred a fawn and a duck."

"That's an old joke," I said.

"Of course," Fensterblau said. His bright gray eyes glittered. "But think of the marvelous addition to my collection such a creature would make! Offer him a quarter of a million if it's authentic, Elroy."

I shrugged. Well, at least it was *warm* in the British West Indies. "Whatever you say, Mr. Fensterblau," I said.



THE MAN WHO MASSED THE EARTH

by Isaac Asimov

JUST A FEW DAYS AGO I WAS AT A dinner party, and a nice lady, whom I did not know, cornered me and, for some reason unknown to myself, began telling me in superfluous detail of the manifold achievements of her son.

Now as it happens I have a very low attention span when the topic of conversation is something other than myself* and so I tried, rather desperately, to break the flow by asking some question or other.

The first that occurred to me was: "And is this admirable young man your only son?"

To which the lady replied most earnestly, "Oh, *no!* I also have a daughter."

It had all been worth it, after all. The lady could not understand why I had broken into delighted laughter, and even after I explained she had trouble seeing the humor of her reply.

Naturally, the juice of the situation was not just that the lady didn't hear me (that might have happened to anyone) but that it seemed to me to reflect, perfectly, the manner in which outmoded traditions of thought interfere with an understanding of the universe as it is.

In pre-industrial society, for instance, male infants were much more valuable than female infants. Baby boys would grow into men and therefore offered, in potential, desperately needed help at the farm or in the army. Baby girls merely grew into women who had to be married off at great expense. Consequently, there was a great tendency to ignore daughters and to equate "child" with "son."

**I am told this, with varying degrees of mordacity (so look it up in the dictionary), by my nearest and dearest, but I maintain that this is not an evil peculiar to myself but is a common, and even necessary, attribute of writers generally.*

The attitude still lingers, I think, even now although the owner of such an attitude may be unaware of it and would deny its existence heatedly if accused of harboring it. I think that when the nice lady heard the phrase "your only son" she honestly recognized no difference between that and "your only child" and answered accordingly.

What has all this to do with this essay? Well, scientists have similar problems, and to this day they cannot free themselves utterly and entirely from outmoded ways of thought.

For instance, we all think we know what we mean when we speak of the "weight" of something, and we all think we know what we mean when we say we are "weighing" something or that one thing is "heavier" or "lighter" than another thing.

Except that I'm not at all sure we really do. Even physicists who are perfectly aware as to what weight really is and can define and explain it adequately tend to slip into inaccurate ways of thought if not careful.

Let me explain.

The inevitable response to a gravitational field is an acceleration. Imagine, for instance, a material object suddenly appearing in space with no acceleration (relative to some large nearby astronomical body) at the moment of its appearance. Either it is motionless relative to that body or it is moving at a constant velocity.

If there were no gravitational field at the point in space where the body appeared, the body would continue to remain at rest or to move at constant velocity. If, however, there *is* a gravitational field at that point, as there must be from that large nearby astronomical body, the object begins to accelerate. It moves faster and faster or it curves out of its original line of motion or both.

Since in any Universe that contains matter at all, a gravitational field (however weak) must exist at all points, accelerated motion is the norm for those objects in space which are subjected to gravitational fields only, and non-accelerated motion is an unrealizable ideal.

To be sure, if two objects are both accelerating precisely the same way relative to a third body, the two objects seem at rest with respect to each other. That is why you so often seem to yourself to be at rest. You *are* at rest with respect to Earth, but that is because both you and Earth are accelerating in precisely the same way in response to the Sun's gravitational field.

But then what about you and the *Earth's* gravitational field. You may be at rest with respect to the Earth, but suppose a hole sud-

denly gaped below you. Instantly, in response to Earth's gravitational field, you would begin to accelerate downward.

The only reason you don't do so ordinarily is that there is matter solidly packed in the direction in which you would otherwise move, and the electromagnetic forces set up by the atoms composing that matter hold those atoms together and easily block you from responding to the gravitational field.

In a sense though, any material object prevented from responding to a gravitational field with an acceleration "tries" to do so just the same.* It pushes in the direction it would "like" to move in. It is this "attempt" to accelerate in response to gravitation that makes itself evident as a force, and it is this force that we can measure and call weight.

Suppose we use a coiled spring to measure force, for instance. If we pull at such a spring, the spring lengthens. If we pull twice as hard, it will lengthen twice as much. Within the limits of the spring's elasticity, the amount of lengthening will be proportional to the intensity of the force.

If, now, you fix one end of the spring to a beam in the ceiling and suspend a material object on the other end of the spring, the spring lengthens, just as though a force had been applied. A force *has* been applied. The material object "tries" to accelerate downward, and the force produced as a result of this "attempt" lengthens the spring.

We can calibrate the spring by noting the amount of lengthening produced by bodies whose weights we have arbitrarily defined in terms of some standard weight. Once that is done we can read off the weight of any object by having a pointer (attached to the lengthening spring) mark off a number on a scale.

All right so far, but our notion of weight is derived, at its most primitive, from the feeling we have when an object rests on our hand or on some other part of our body, when we must exert a muscular effort to keep it motionless with respect to Earth's gravitational field. Since we take Earth's gravitational field for granted and never experience any significant change in it, we attribute the sensation of weight entirely to the object.

An object is heavy, we think, because it is just naturally heavy and that's it, and we are so used to the thought that we don't allow ourselves to be disturbed by obvious evidence to the contrary. The

*In this paragraph I am deliberately putting in quotes all the words that appear to give inanimate objects human desires and motivations. This is the "pathetic fallacy" and it should be avoided, except that it's such a convenient way of explaining things that sometimes I simply cannot resist being pathetic.

weight of an object immersed in a liquid is decreased because the upward force of buoyancy must be subtracted from the downward force imposed by the gravitational field. If the buoyant force is great enough, the object will float, and the denser the liquid the greater the buoyant force. Thus wood will float on water and iron will float on mercury.

We can actually feel an iron sphere to be lighter under water than in open air, yet we dismiss that. We don't think of weight as a force that can be countered by other forces. We insist on thinking of it as an intrinsic property of matter and when, under certain conditions weight falls to zero, we are astonished, and we view the weightless cavortings of astronauts as something almost against nature. (They are "beyond the reach of gravity" to quote the illiterate mouthings of too many news-casters.)

It is true that weight depends in part on a certain property innate in the object, but it also depends on the intensity of the gravitational field to which that object is responding. If we were standing on the surface of the Moon and were holding an object in our hand, that object would be "attempting" to respond to a gravitational field that was only one-sixth as intense as that on the surface of the Earth. It would therefore weigh only one-sixth as much.

What is the intrinsic property of matter on which weight partly depends? That is "mass" (see ON THROWING A BALL, F & SF, August 1969), a term and concept which Newton introduced.

The force produced by a body "attempting" to respond to a gravitational field is proportional to its mass as well as to the intensity of the gravitational field. If the gravitational field remains constant in intensity at all times (as is true, to all intents and purposes, of the Earth's gravitational field if we remain on or near its surface), we can ignore that field. We can then say that the force produced by a body "attempting" to respond to Earth's gravitational field under ordinary circumstances is simply proportional to its mass.

(Actually, Earth's gravitational field varies from point to point, depending on the exact distance from the point to Earth's center and on the exact distribution of matter in the neighborhood of the point. These variations are far too tiny to detect through changes in the muscular effort required to counter the effect of weight, but they can be detected by delicate instruments.)

Since weight, under ordinary circumstances is proportional to mass and vice versa, it is almost unbearably tempting to treat the

two as identical. When the notion of mass was first established, it was given units ("pounds," for instance) which had earlier been used for weight. To this day we speak of a mass of two kilograms and a weight of two kilograms and this is wrong. Units such as kilograms should be applied to mass only and weight should be given the units of force—but go talk to a brick wall.

The units have been so arranged that on Earth's surface, a mass of 6 kilograms also has a weight of 6 kilograms, but on the Moon's surface that same body will still have a mass of 6 kilograms and a weight of only 1 kilogram.

A satellite orbiting the Earth is in free fall with respect to the Earth and is already responding in full to Earth's gravitational field. There is nothing further for it to "attempt" to do. Therefore a mass of 6 pounds on the satellite has a weight of 0 pounds, and the same is true of all objects, however massive. Objects on an orbiting satellite are therefore weightless. (To be sure, objects on an orbiting satellite ought to "attempt" to respond to the gravitational fields of the satellite itself and of other objects on it, but these fields are so negligibly small, they can be ignored.)

Does it matter that the close match of weight and mass to which we are accustomed on the surface of Earth fails elsewhere? Sure it does. An object's inertia, that is, the force required to accelerate it, depends entirely on its mass. A large metal beam is just as difficult to maneuver (to get moving when it is at rest, or to stop when it is moving) on the Moon as on Earth, even though its weight is much less on the Moon. The difficulty of maneuver is the same on a space station even though weight is essentially zero.

Astronauts will have to be careful, and if they don't forget Earth-born notions, they may die. If you are caught between two rapidly moving beams, you will be killed even though they are weightless. You will not be able to stop them with a flick of your finger even though they weigh less than a feather.

How can we measure mass? One way is to use the kind of balance consisting of two pans pivoting about a central fulcrum. Suppose an object of unknown weight is placed in the left pan. The left pan sinks and the right rises.

Suppose, next, a series of metal slivers, weighing exactly one gram each, are added to the right pan. As long as all the slivers, put together, weigh less than the unknown object, the right pan remains raised. When the sum of the slivers weighs more than the unknown,

the right pan sinks and the left pan rises. When the two pans balance at the same level, the two weights are equal and you can say that the unknown weighs (let us say) 72 grams.

Two weights at once are being subjected to the action of the gravitational field, and the effect of that field cancels out. If the field is intensified or weakened, it is intensified or weakened on both pans simultaneously, and the fact that the two pans are balanced is not affected. The two pans would remain in balance on the Moon, for instance. Such a balance is, therefore, to all intents and purposes measuring the one other property on which weight develops—mass.

Scientists prefer to measure mass rather than weight, and so they train themselves to say "more massive" and "less massive" instead of "heavier" and "lighter" (though only with an effort and with frequent slips).

And yet they haven't freed themselves utterly from pre-Newtonian thinking even now, three centuries after Newton.

Picture this situation. A chemist carefully measures the mass of an object by using a delicate chemical balance and brings two pans into equilibrium as we have described. What has he done? He has "measured the mass" of an object. Is there any shorter way of saying that correctly? No, there isn't. The English language doesn't offer anything. He can't say he has "massed" the object, or "massified" it, or "massicated" it.

The only thing he can say is that he has "weighed" the object, and he *does* say it. I say it, too.

But to weigh an object is to determine its weight, not its mass. The un-reformed English language forces us to be pre-Newtonian.

Again, those little slivers of metal that weigh a gram each (or any other convenient quantity or variety of quantities) should be called "standard masses" if we are to indicate they are used in measuring mass. They are not. They are called "weights."

Again, chemists must frequently deal with the relative average masses of the atoms making up the different elements. These relative average masses are universally called "atomic weights." They are ***not*** weights, they are masses.

In short, no matter how well any scientist knows (in his head) the difference between mass and weight, he will never really know it (in his heart) as long as he uses a language in which hang-over traditions are retained. —Like the lady who saw no difference between "only son" and "only child."

Now let's move on. In the articles of the preceding two months, I talked about the masses of astronomical objects in terms of the mass of the Earth. Jupiter is 318 times as massive as Earth; the Sun is 330,000 times as massive as Earth; the Moon is 1/81 times as massive as Earth and so on.

But what is the mass of the Earth itself in kilograms (or any other unit of mass that we can equate with familiar everyday objects)?

To determine that we must make use of Newton's equation, presented last month, which is:

$$F = GmM/d^2 \qquad \text{(Equation 1)}$$

If this equation is applied to a falling rock, for instance, F is the gravitational force to which the rock is responding by accelerating downward, G is the universal gravitational constant, m is the mass of rock, M is the mass of the Earth, and d is the distance of the center of the rock from the center of the Earth.

Unfortunately, of the five quantities, the men of the 18th Century could only determine three. The mass of the rock (m) could easily be determined, and the distance of the rock from the center of the Earth (d) was known as far back as the time of the ancient Greeks. The gravitational force (F) could be determined by measuring the acceleration with which the rock was responding to the gravitational field, and that had been done by Galileo.

Only the values of G, the gravitational constant, and M the mass of the Earth remained unknown. If only the value of G were known, the mass of the Earth could be calculated at once. Conversely, if M were known, the universal gravitational constant could be quickly determined.

What to do?

The mass of the Earth could be determined directly if it could be manipulated; if it could be placed on a balance pan against standard weights or something like that. However, the Earth cannot be manipulated, at least by men in a laboratory, so forget that.

Then what about determining G. This is the universal gravitational constant, and it is the same for *any* gravitational field. That means we don't have to use the Earth's gravitational field to determine it. We might instead use the gravitational field of some smaller object which we can freely manipulate.

Suppose, for instance, we suspend an object from a spring and lengthen the spring thanks to the effect of Earth's gravitational field. Next, we take a large boulder and place it under the suspended object.

The gravitational field of the boulder is now added to the Earth's gravitational field and the spring is extended a little further as a result.

From the amount of the additional lengthening of the spring, we could determine the intensity of the gravitational field of the boulder.

Now let us use the following variation of Newton's equation:

$$f = Gmm'/d^2 \qquad \text{(Equation 2)}$$

where f is the gravitational field intensity of the boulder (measured by the additional extension of the spring), G is the gravitational constant, m the mass of the object suspended from the spring, m' the mass of the boulder, and d the distance between the center of the boulder and the center of the suspended object.

Everyone of these quantities can be determined except G, so we rearrange Equation 2 thus:

$$G = fd^2/mm' \qquad \text{(Equation 3)}$$

and at once have the value of G. Once we know that value we can substitute it in Equation 1, which we can then solve for M (the mass of the Earth), as follows:

$$M = Fd^2/Gm \qquad \text{(Equation 4)}$$

But there is a catch. Gravitational fields are so incredibly weak in relation to mass (see FIRST AND REARMOST, F & SF, October 1964) that it takes a hugely massive object to have a gravitational field intense enough to measure easily. The boulder held under the suspended object would simply not produce a measurable further extension of the spring, that's all.

There is no way of making the gravitational field more intense, so if the problem of the mass of the Earth was to be solved at all, some exceedingly delicate device would have to be used. What was needed was something that would measure the vanishingly small force produced by the vanishingly small gravitational field produced by an object small enough to be handled in the laboratory.

The necessary refinement in measurement came about with the invention of the "torsion balance" by the French physicist, Charles Augustin Coulomb, in 1777 and (independently) by the English geologist, John Mitchell, as well.

Instead of having a force extend a spring or twist a pan about a fulcrum, it was used to twist a string, or wire.

If the string or wire were very fine, only a tiny force would be

required to twist it quite a bit. To detect the twist, one need attach to the vertical wire a long horizontal rod balanced at the enter. Even a tiny twist would produce a large movement at the end of the rods. If a thin wire is used and a long rod, a torsion balance could be made enormously delicate, delicate enough even to detect the tiny gravitational field of an ordinary object.

In 1798, the English chemist, Henry Cavendish (see SLOW BURN, F & SF, October 1962) put the principle of the torsion balance to use in determining the value of *G*. (This is something I have been promising to talk about for two months now.)

Suppose you take a rod 6 feet long and place on each end a 2-inch-in-diameter lead ball. Suppose you next suspend the rod from its center by a fine wire.

If a very small force is applied to the one lead ball on one side and an equally small force to the other lead ball on the other side, the horizontal rod will rotate and the wire to which it is attached will twist. The twisting wire "attempts" to untwist. The more it is twisted the stronger the force-to-untwist becomes. Eventually, the force-to-untwist balances the force causing it to twist and the rod remains in a new equilibrium position. From the extent to which the rod's position has shifted, the amount of force upon the lead balls can be determined.

(Naturally, you must enclose the whole thing in a box and place it in a sealed constant-temperature room so that no air currents—produced either by temperature differences or mechanical motions—confuse the situation.)

Where the rod takes up only a slightly different position it means that even a tiny twist of the fine wire produces enough counterforce to balance the applied force. What a tiny force it must then be that was applied—and that was exactly what Cavendish had in mind.

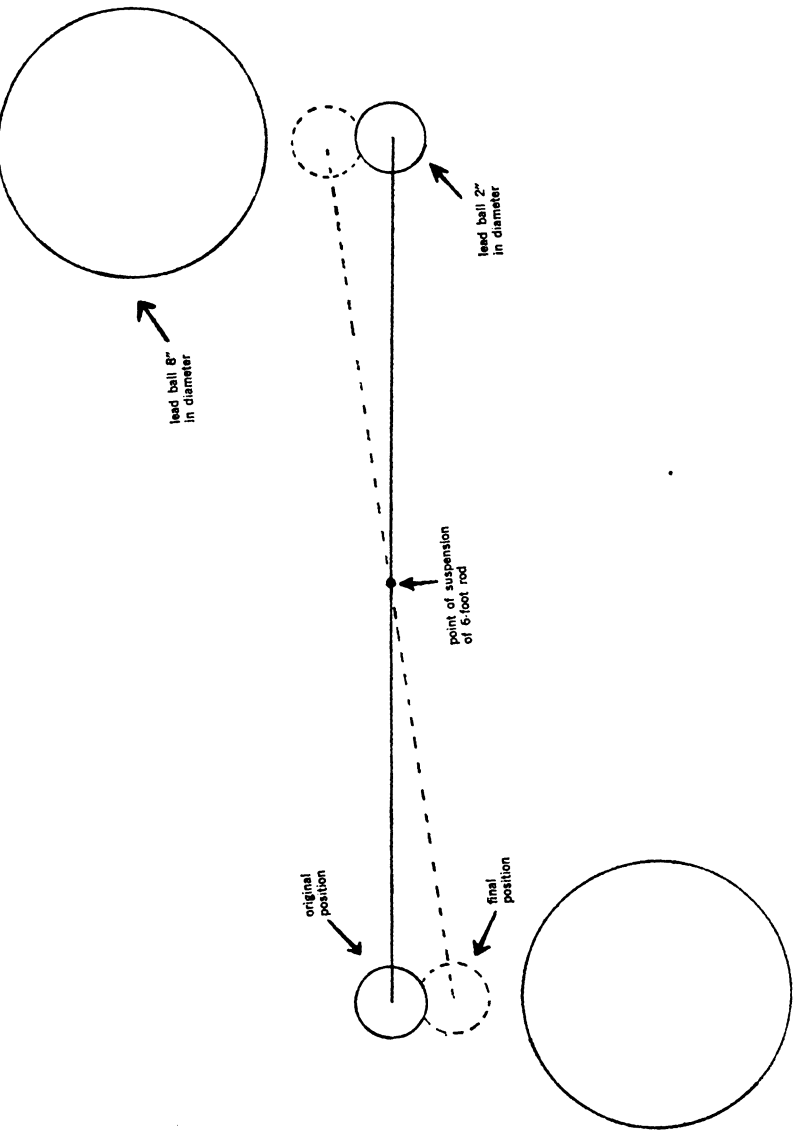
He suspended a lead ball 8 inches in diameter on one side of one of the small lead balls at the end of the horizontal rod. He suspended another such ball on the opposite side of the other small lead ball.

The gravitational field of the large lead balls would now serve to twist the rod and force it into a new position (see Figure 1).

Cavendish repeated the experiment over and over again and from the shift in the position of the rod and, therefore, from the twist of the wire, determined the value of f in Equation 3. Since he knew the values of m, m' and d, he could calculate the value of G at once.

Cavendish's value was off by less than 1 percent from the value now accepted, which is 0.0000000000667 meters^3/kilogram-second^2.

Figure 1—Cavendish's experiment seen from above



(Don't ask about the significance of that unit; it is necessary to make the equations balance.)

Once we have the value for G in the units given, we can solve Equation 4, and if we use the proper units, out will pop the mass of the Earth in kilograms. This turns out to be 5,983,000,000,000,000,000,000,000 or 5.983×10^{24} kilograms. (If you want it, roughly, in words, say "about 6 septillion kilograms.")

Once we have the Earth's mass in kilograms, we can determine the mass of other objects, too, provided only their mass relative to that of Earth is known.

The Moon, which has a mass 1/81 that of the Earth, has a mass of 7.4×10^{22} kilograms. Jupiter, with a mass 318 times that of Earth, has a mass of 1.9×10^{27} kilograms. The Sun, with a mass 330,000 times that of Earth, has a mass of 2×10^{30} kilograms.

Thus, Cavendish not only measured the mass of the Earth, but he measured (at least potentially) the mass of every other object in the Universe just by noticing the small shift in position of a pair of lead balls when a pair of larger lead balls were placed nearby.

How's that for the power of a simple equation?

But—and here is the point of the whole article—when someone wishes to mention this astonishing achievement of Cavendish's, what does he say? He says: "Cavendish weighed the Earth."

Even physicists and astronomers speak of Cavendish as the man who "weighed the Earth."

He did no such thing! He determined the *mass* of the Earth. He *massed* the Earth. It may be that English has no such verb, but that's the fault of the language not of me. To me Cavendish is the man who massed the Earth, and English can like it or lump it.

Which leaves one question: What *is* the weight of the Earth?

The answer is simple. The Earth is in free fall and, like any object in free fall, it is responding in full to the gravitational fields to which it is subject. It is not "attempting" to make any further response and therefore it is weightless.

The weight of the Earth, then, is zero.

The creator of "The People" here turns her attention to an overcrowded future, where loneliness, regulations and artifice are the norm, and gives us a sympathetic portrait of a family fighting against the crushing burden of being away too long from things natural.

J-LINE TO NOWHERE

by Zenna Henderson

IT *was* THERE! IT WAS THERE all around me. To smell and to touch. To hear and to feel. Our way out—our answer—our escape. And now it's lost. I found it and let it get lost again. But we'll find it! Chis says he'll find it if it takes even until he is twelve years old! We're working on it already, but it's difficult when you daren't ask a direct question. When you daren't tell anyone for fear—well, for fear. Chis is really brighted about looking for it. And nothing ever brights Chis any more—except maybe hopping the forbidden hi-speed freight glides. And I, Twixt Garath, sister to Chis, daughter to Mother and Dad, I'd be brighted, too, if I weren't busy roaring myself endlessly for letting our miracle come—and go again—unlocated, on the J-line.

I remember when it all started—even if I can't tell you why it all happened.

One day in our unit not so long ago, Mother turned to me suddenly and clutched my arm with both her hands. Her nails made dents in my skin, she held so tightly. For a second I was startled. Mother hadn't touched me for so long—so long—

"I can't see out!" she protested and I could feel her hands shaking. "I can't see any way out!"

"Out of what?" I asked, feeling sick inside and scared because she seemed to be crumpling. She even looked smaller. "Out of what?" I repeated. Whoever heard of seeing out of a unit?

"Out of anything!" she said. "Is there still a sky? Do ants still make bare paths through the grass? When will the shell empty? Our bones used to be inside!"

"Mother," my voice wobbled. "Mother, you're hurting me." And she was. Red was oozing up around her nails. She let go, sucking her breath in surprise. I dabbled my arm with a tissue. "Shall I call Clinic? Are you hurting somewhere?"

"I'm hurting everywhere and all the time," Mother said. She turned away and leaned her forehead against the wall. She rolled her head back and forth a little as she talked. "I'm not quite so crazed across as I sound." Her voice was muffled. "I used to think those ant trails through the grass were the loveliest, most secret things in the whole world. I was charmed to think of a whole civilization that could function without a single idea that we even existed. And that's what I'm feeling now—a whole civilization functioning without even knowing I exist. And it's *my* civilization! And I'm not charmed about it any more!

"Remember that undersea vacation we had two years ago? We saw those shells that were so lovely. And they told us that the shells were the external skeletons of the tiny, soft creatures inside. No one cared about the tiny, soft creatures inside—only the bright shell. They forgot that the soft creatures *made* the bright shell—not the bright shell the creatures. As though the bright shell were the only excuse for the creature!" She turned slowly, her head rolling as she turned, until she finally leaned her back against the wall, her hands behind her. "Most people think we exist for our lovely exterior skeletons. They think we're only the unimportant soft little creatures inside all these shells—these buildings and walls and towers and glides. That we couldn't exist without them. But I have my own bones! Inside me! I don't *need* all these skeletons!"

And she stood there with tears running down her cheeks, her bottom lip caught in her teeth.

What do you do when your mother just stands there with tears rolling down her face? I didn't know either, so I got a tissue and gave it to her. She wiped her face and hugged me tight. I could feel the wetness of her tears above my ear as she hugged. How odd! How odd to feel the warmth of another person, so close! How odd, but how wonderful!

"Twixt," she said, letting go of me to look at me. "Have you ever run barefoot through the grass? Or squished mud up between your toes?"

"We don't ever touch the greeneries." I sounded like a tired First Level tape. "They are the breath of the complex. Maybe one touch wouldn't matter, but who are you

that you should touch and others not be allowed to? And there's no soil as such in the megapolis," I chanted. "The greeneries are all hydroponics."

"Remember when you were taking mythology," said Mother. My head swam as I tried to keep up with her quick switches. "Remember that man who was strong as long as he touched the earth and lost his strength when he was lifted off it?"

I nodded. "Hercules killed him after he held him off the ground so long he got weak."

"We are all like him," said Mother. "And we've been held off the earth too long. We'll die if we don't touch down soon."

Maybe *that* explained the funny feeling that had been growing inside me for so long—and twisting me so much of late. Maybe I was dying slowly because I couldn't touch down. But since I don't remember ever having touched down, how could I be suffering because I couldn't—I snatched back to Now. What I was feeling most was uncomfortable, wondering what to say next.

I was spared, though. Mother glanced quickly at the timeline rippling along near the ceiling, snatched her bag from the table and a kiss from the air in the vicinity of my cheek, and slid the door to the corridor in a wild flurry of haste. I could have looked at the log to find out what she was late for, but I felt too quenched even to flip her info switch to see.

I went to the slot wall and flipped the latch of mine. I kicked off my pneumonosoles and lay down on the bed, clicking the panel shut. The lulltone came on in my pillow, and the conditioning currents began to circulate to adjust to night settings. I was crying now—tears running down into my ears on both sides. "I hate! I hate! The whole unit—the whole complex—the whole everything!" I sobbed to myself. "I hate it, but I'm *used* to it! What can we do else, but be used to it!" I thumped my pillow. "Gonky slot!" I sniffed. "Too stupid to know it isn't night!" Then my tears stopped as I suddenly thought, "Am I any smarter? How do I know it's day? I've been doing day-things just because the timeline says it's day, but how do I *know* it's day?" Tears flowed again. "But I did see the sun once! I did! It's big and up and so bright you can't see it!"

So that's when the whole thing started, or at least that's when I started knowing there *was* a thing. It had been an odd, mixed-up day all day. This was only another uncomfortable piece to be fitted in. I had been hoping, in some tiny corner of me, that Mother would be willing to communicate and that by having someone to tell, I

could get the day pushed down to its true proportions—or at least be able to blunt a few uncomfortable sharp things that jabbed.

That morning, with my usual sense of reaching a refuge, I had slipped into my study carrel at school. When I was in it and facing the viewer, I could shut the whole world out. I could get so absorbed that when break-time came I'd have to blink myself back to Now and wander in a fog down to the physical area. I sometimes envied the kids who were so loose that they could get together before break-time, volunteer one of them as a puncher to cover six or eight carrels besides his own, and then stand gabfesting in a tight little wad in the corridor while the puncher wore himself out punching enough responses to prevent Supervisory from investigating, or calling for a check response from everyone simultaneously.

Our level isn't required to do movement beyond our daily compulsory half hour first thing in the morning, so we usually sit around the area and, well, you know—music and eating and drinking and talking—and boys. At least for some. I had no pash as yet. Time enough. No one can even put in for marriage evaluation until 21—and lucky to get certified before 25. Mother and Dad were married—younger than that—just before Evaluation and Certification came in. I asked them once how they could tell, then, that their marriage could be functional. Dad laughed—he still could laugh then—and looked at Mother. She pinked and he said, "Some knowledge isn't programmable. You'll find out."

Well, back to the student lounge. I had headed for my usual bench where my other-end-of-the-alphabet friend would be waiting with our two containers of Squelch—chartreuse was the Squelch month-flavor, and I loathed it, but everyone was drinking it, so—The lounge was overflowing with a waltz—the old dance-form that has been staging a big comeback. Chis and I used to have fun with it at home at night—along with Dad and Mother—way back when we still had fun together. I wonder what happened to us? Most of the kids think the waltz is too strenuous and barbaric really to dance, since it involves continuous large-muscle movements, but my heart swung with remembered pleasure when I heard the music.

I was cutting across a corner of the area, not paying much attention to the few couples swishing around it. Hardly anyone notices their touching any more. It is assumed that it is with permission. Well, there I was crossing the floor when I was snatched out into the middle of it and into the dance. My feet responded automatically and were waltzing hap-

pily long before the top of me had time to wonder what the drill was.

"Hey! You've got two right feet!" The creature who had grabbed me—*without* permission! —was very pleasantly surprised.

"But I didn't intend to—" I began, annoyed, but he just grinned and almost swung me off the floor. I got so interested in keeping up with all the variations that he knew, that I forgot to be annoyed and just enjoyed! It was swinging way out away from anything. It was being loose in such a beautiful way that shouts built up inside me but came out as rhythmical swirling—and the warmth—the round warmness around us and around us and around—

The music stopped and there we were in the middle of the floor, panting and laughing and looking. At least I was looking. The fellow had his eyes pointing at me, but he didn't see me—not really. No more than if we had passed on a glide somewhere. I was just an adjunct to his dancing.

Suddenly very cold and angular and conscious of the ring of eyes around us, I loosened my cooling hands from his. He turned his smile off and mine died. "Lellice is waiting," I said. I didn't even wait for him to walk me the four courtesy steps. I fled to Lellice who stood there open-mouth—as usual—and clammy-handed from clutching our Squelches.

"Close your mouth," I said, still breathless, my heart not compensating as quickly as it should have. "No cavern tours today."

"That—that was Engle!" she said in an awed whisper. "Engle Faucing!"

"Oh?" I grimaced at the first taste of chartreuse. "Who's he?" I could not-see him too! Besides, I really hadn't noticed.

"Who's he!" Lellice strangled chartreusely. "*Only* the son of Kermit Faucing, megapolis council member! *Only* the Rep of Senior Levels to the Governing! You voted for him! *Only* the utter out of all outness!"

"Oh, I'm sorry," I said. "He looked like a nice kid. Poor thing."

"Poor thing!" yelped Lellice. "Have you crazed across?"

"To have a name like Engle Faucing," I explained. "It's as left-footed as his dancing." I regretted that as soon as I said it. He could dance—could *dance*—but only with his feet, I guess.

"Twixt! You sheerly are double-dump-stuff!" Lellice turned her back on me and loudly went on drinking her Squelch.

The outside of me walked back to my carrel after the break, as usual, but the inside of me, for some reason, crept back unhappily and huddled tightly as I sat down in my chair. I stared blindly at the viewer, thinking nothing—only feeling a three-quarter beat pulsing—I thumbed the response

button viciously and went off into history, silencing the tutor's jabbing introductory voice.

And then of course it was Release Time today. I usually like the break from regular school and feel pleased and loose for sure when we all go up to the church floor of the school complex and drift off, each to his own instructional class. I like getting into discussions of matters in which Man is the most important thing about earth instead of his just being an eddy of life around the bottom of the eyeless, towering buildings. But that day we had Immortality for our lesson. I suddenly couldn't even want to believe in it. Not with flesh so soft and unhappy and walls so hard and uncaring. I drooped, wordless, through the class.

Afterwards, everyone else left the building to go to their usual glides, but I cut through another way to go on an errand for Mother. All alone in the school Open, I looked up and up the sheer wall that towered without an opening on this side from Crib Level all the way up to Doctor's Degree. And it scared me. What if it should fall on me! I was so little and I could die! The building looked as though it didn't know I was alive. It looked solid enough to go on forever and ever after I died. I suddenly hammered my fists against the vitricrete and cried, "*I'm* supposed to be immortal, not you! You—you *unlive* you! I've got a soul! Whoever heard of a vitricrete soul!"

But I was the one that bruised, and the vitricrete didn't even plop when I hit it.

And then home to Mother's breaking. And my tears in the slot. And a weary going on with the usual routine.

Dad came home that evening more silent than ever, if that's possible. My tears were long dried and I was sitting on the floor in front of the telaworld watching the evening news. I gave Dad a hi! and cut my picture to half a screen to clear for his sports program. I removed the ear so I could hear what Dad had to say.

"Chis?" Dad asked as he flipped a finger to inflate the chair to his weight before he dropped wearily into its curving angles.

"Not in yet," said Mother guiltily, her face pinking.

"He knows," said Dad. "Guidance warned us—and him. If he glide-hops once more or enters male-subteen-restricted areas, he'll go to therapy."

"And so will we," I thought sickly. "The whole family will have to go to therapy if Chis does. Illness isn't isolated."

"I—I—" Mother looked miserable. "Darin, can't we do *something* for Chis? Can't we get him brighted on anything?"

"Like what?" Dad filled his half of the telaworld with his under-

water program and fumbled for the ear. "Even Guidance is stumped."

"But at ten?" Mother protested. "At *ten* to be so quenched on everything?"

"Guidance says they're working on it." Dad sharpened the focus on his half-screen. A shark seemed to swim right off the screen at us. "He's on page 14 in volume 2—of the ten-year-olds. I wonder which page they'd have me on?" He turned from the tela-world. "I don't imagine the list would be very long of malcontent males who stop in midmorning to remember the feel of sand dissolving from under his bare feet in a numbing-cold, running stream."

"I wish," said Mother passionately, "that we could—just go!"

"Where?" asked Dad. "How? We'd have to put in for locale amends, specifying a destination and motivation. Besides, is there any place—"

"Just *any* place," said Mother rigidly.

"Would it be different?" I asked, feeling hope surge up inside me. Mother looked at me silently for a moment; then she sighed and her wrists went limp. "No," she almost whispered. "It would be no different."

I didn't know when Chis came in. I guess he slid the secondary exit. But there he was, sitting in his corner, twirling and twirling a green stem between his fingers —a green stem with four leaves on it. I felt my heart sag. He had picked a leaf! From greenery!

Mother saw him about the same time I did. "Chis," she said softly, and Dad turned to look. "Is that a real leaf?"

"Yes," he said, "a real one."

"Then you'd better put it in water before it dies," said Mother, not even a tone in her voice to hint of all the laws he had broken.

"In water?" Chis' eyes opened wide and so did mine.

"Yes," said Mother. "It will last longer." She got a plastiglass from the dispenser and filled it. She held it out to Chis. "Put the stem down in the water," she said. And he did. And stood there with the glass tipping almost to spilling and looked at Dad. Then he leaned over and put the plastiglass on the table by Dad's chair. Dad looked at the leaf and then at Chis.

"Will it grow?" asked Chis.

"No," said Dad. "It has no roots. But it will stay green for a while."

Chis reached his hand out and touched Dad gently on the shoulder. Dad showed no withdrawal. "I won't ever take another," offered Chis.

"It's better not," said Dad.

"But someday," cried Chis, "I'm going away! I'm going to find a place where I can *run* on a million, million leaves and no one will even notice!"

I hunched there in front of the telaworld and felt myself splintering slowly in all directions into blunt slivers that could never fit together again. This must be what they meant by crazing across. I was immortal, but I must die. And soon, if I couldn't touch the soil I had never touched. I didn't want to touch anywhere, and yet I could still feel a hand enveloping mine and another pressed firmly against my waist. I hated where I was, but sickened to think of change. But change had to come because it had been noticeable that Dad hadn't withdrawn when his own son touched him. Nothing would be smooth or fitted together again—

I creaked tiredly to my feet. Mother quirked an eyebrow at me. "Only to the perimeter," I said. "I want to walk before dimming."

Outside our unit I paused and looked up the endless height of the building—blind, eyeless, but, because it is an older unit, I could still see scars where windows used to be—when windows were desirable. I walked slowly toward the perimeter, automatically reminding myself not to overstep. With Chris already on warning, it wouldn't do for me to be Out of Area after hours. Someday—some long away day—I'd be twenty-one and be able to flip my Ident casually at the Eye and open any area, any hour of the day—well, not the Restricted, of course. Or the Classified. Or the Industrial. Or the—well, I have the list at home.

Around me, as *up* as I could see, were buildings. Around me as *far* as I could see, were buildings. The Open of our area, ringed about by the breathing greeneries, must have had people coming and going, surely a few, but I didn't see them. I seldom do any more. Of course, you never deliberately *look* at anyone. That's rude. Nor ever speak in public places except when you absolutely have to. You *do* murmur to friends you meet. And because you don't look and don't speak, people sort of get lost against the bigness and solid-builtness of the complexes. So I walked alone in the outer dimming, my pneumonosoles not even whispering against the resilicrete floor of the Open.

I found myself counting steps and wondered why. Then I smiled, remembering. Twenty-six paces this direction, then fourteen to the left, four small slides to the front, and a settling of feet slightly the other way, and—

I slowly turned my head. Yes, I had remembered my old formula right. I had found the exact spot under the lights. No matter which way I looked, I could see a shadow of me. I was standing in the center of a bouquet of my own shadows! How pleased I used to be with the visual magic. No matter what shadow I saw, it was

mine! All of the me's belonging to the one me! How enchanting it had been when I was young. But now the shadows no longer pointed at me—but away. I wasn't being put together any more. I was being pulled apart—thinned to no more substance than my own shadow. I ached. Then I turned back to the unit. All the other me's went somewhere else. I felt drafty and very small at the complex door.

That night I lay awake in my slot long after inner dimming. Every time I shut my eyes, I was swinging around the lounge again, with a disturbing sense of nearness. I don't like nearness. It interferes. You have to react, even if you'd rather not. And how can you be near to someone who doesn't even see you but just rubs his eyes past the place where you are?

My pillow was hard. The lull-tone was off-key. The air exchange was all wrong. And I was dancing again, around and around, farther and farther away from the lounge but nearer and nearer and nearer—

"Engle Faucing! What a gonky name!" I muttered and poked my pillow. Then I was counting. "—Seventeen, eighteen, nineteen, twenty, twenty-one, twenty-one, twenty-one. Five is so many years! So many!"

I flipped up in bed, hunching automatically to keep from thumping my head on Chis' slot. *What* was the matter with me? I couldn't be sickening for anything. Our lavcube is standard—we have the immunispray installation, so I couldn't be sickening for anything. I flopped back down and closed my eyes resolutely. And whirled around and around and shadow and *one* twothree *one* twothree—

At break-time next day I went to the lounge, expecting—I don't know what I was expecting. Engle was dancing with someone, swinging effortlessly around and around. I felt my chest clench on something that wanted to explode. Lellice was waiting for me on our usual bench, clutching two Squelches.

"Too bad," she said, as I grimaced through my first swallow of the gonky stuff.

"Too bad what?" I asked when I could.

"Too bad he doesn't dance with you again," Lellice said. "You sure were brighted."

"Waltzes always bright me," I said, wishing Lellice would cut it.

"But just think," she sighed. "If Engle had danced with you today, and then tomorrow, you'd have been opted, and he'd *have* to bid you to the BB—"

The BB! I'd forgotten all about the BB. Forlornly I let my Squelch dangle from my lax hand. "Ifing never did anything," I said. "And

nuts to the BB!" I wasn't about to let her think that I'd ever hoped—

"Twixt!" Lellice's eyes got big. "Such language! Besides, this is the first year you've been eligible to be bid—"

"Fooey on the BB—" I groped for every archaic, left-handed phrase I could remember. "Big Blasts are for the birds! Who needs them! And this Squelch! It stinks!" I dropped the container and kicked it viciously. It rolled out onto the dance area, dribbling that gonky chartreuse in a sticky stream across the shining. And Engle—all unsuspecting—circling with his partner, stepped in the sticky stuff. And fell flat. And pulled his partner down. And her skirts flipped. And I just stood there *looking* and laughing so loudly that everyone in the room became aware of me. And of the two of them because of me.

I think I would have died on the spot if the break bell hadn't rung and emptied the lounge with most unusual speed. No one wants to be around a situation. Not even Lellice, though she did hesitate, her mouth open, before she gulped and fled. Engle left last. He looked back over his shoulder, dabbling at his Squelchy sleeve. "*Three* left feet!" he said. But he *looked* at me! He saw me! And, which was the worst of all, he'd remember me—and the Squelch.

Everyone was gone. I kicked the dribbling Squelch container with short vicious kicks clear across the deserted floor and all the way down the hall. I picked up the half-empty, battered thing and carried it into my carrel. As I sat in the chair that was molded to me from such long sitting-in, the post-break tape was activated.

"Good morning, Twixt," said the history tutor brightly. "If you'll dial the year 1960, we'll begin. Good morning, Twixt. If you'll dial the year 1960, we'll begin. Good morning—"

I slammed the Squelch container down on the viewer. Then I deliberately poured the Squelch, to its last oozy drop, into every hole and crack and crevice I could find. With set teeth, I pushed every button in sight—by the palmsful. And pulled every lever —handsful at a time! Then right in the middle of the morning and just because I wanted to, *I left school!*

I was so quaked that I could feel my toenails curling. I can't remember a thing about leaving the school complex or how many glides I boarded to what other glides, nor can I remember off-stepping at whatever J-station I off-stepped into. I was too busy to notice anything—too busy arguing in wordless savage gusts with no one.

I didn't even hesitate at the J-station, though I had never in all my life boarded a J-line by myself.

I didn't look at signs or colors or sizes. I just pushed into the first empty jerkie I saw, actually pushed, taking with me, defiantly and uncaringly, the sight of the shocked eyes of the woman I had touched with no valid excuse. The door slid and I fumbled at the destination controls, not knowing how or where to punch for. Then I was crying with huge gulping sobs sandwiched between thin, tight whinings. I hammered the controls blindly with both fists and was jerked back against the seat in a sodden heap of misery.

I have no idea how long it was before I was jerked off the J-line to the destination my fists had chosen. Then I was jerked again. And again, bruisingly, the other way. Then the jerkie glided to a stop. I had thirty seconds to exit before the jerkie would be jerked back to the J-line, but I scrambled out afraid of getting caught half through the door. Snuffling and dabbling at my face, I turned back toward the jerkie, hoping no one would notice. And stopped in mid-turn in blank wonder.

Where on earth was I?

There was no J-station. No station list, no line color code, only a narrow rail and a slab of some sort of crete that was cracked across.

And green! Green all around me! Underfoot, ankle deep! Higher than my head, covering the J-line tower completely and the smaller wooden—why, that wasn't a smaller tower! It was a tree! Just like the tapes! I waded through the green, guiltily looking around to find some way to get onto a legal paving. There wasn't any. No paving! Anywhere! I stumbled over to the tree and touched it—the brown, unleafed part—the trunk. I guess I fingered the bark too roughly because a piece came loose. I tried hastily to put it back, but I fumbled and it fell. I dropped to my knees to get it, but there were so many pieces on the ground that I couldn't tell which one I had broken. I picked up one piece and shredded it in my fingers. I tasted it. It tasted like—like a tree! Warm and woody and dusty and real.

And then I saw it. There at my knee. The enchanting little line of bareness running out of sight into the green. Breathlessly I slid down to my stomach, my cheek pressed to the green. I peered along the shadowy, secret hidden way. Now if only—if only—! And one did come! An ant, carrying something, hurrying along, so tiny! So tiny! On tapes they look so big and quick and armored.

I watched until the ant was out of sight—all unknowing of me. Then with a deep, shaking sigh, I sat up and looked around me. More trees—more green slanting

down out of sight towards the smell of water, and a liquid sound. Then something moved across the green invisibly, bending it toward me. I *felt* a flowing around me. Wind! Wind blowing because it was a wind, not because a thermostat told it to!

"Here," I thought, "here is a place that wouldn't be the same! If we could only get locale amends for here!" I scrambled to my feet, suddenly clutched by wonder.

"There's no one," I whispered to myself in disbelief. "Here I am and there's no one else. Not anywhere. No one to see. No one to hear. No one to sense—!"

My arms lifted as though they knew wings and my feet barely touched the green as I surged my whole self up. Then in one swift, collapsing motion, I folded me down and stripped my feet bare. I ran fast, fast, and lightly—oh, lightly! across the green, the bottoms of my feet giggly at the spiky soft of the green and my hair flowing back from my face as my running made a little wind for me all alone. When had I last run? Oh, years! Oh, never before like this—never with boundlessness around me and such freeness!

Suddenly I was plunging down a steep slope unable to stop. Below me was a wide blue glint—water! As big as the ocean! I could drown in it! And I couldn't stop myself. My frightened, clutching hands caught leaves and tore them off the plants as I plunged past. Then I caught a branch and felt my shoulder yank back and pull me to a stumbling stop right in the edge of the glinting. I stood panting and shaken, watching the boiling brown water slosh my ankles. Then the water slowly cleared and I could see the distortion of my feet in the flowing wetness. I took a cautious step. I felt graininess dissolve under the soles of my feet. Sand melting away—just as dad had said, only this water wasn't numbing cold. It was brightly cool. I took another step and felt a squishy welling up between my toes! Mud between my toes! *Squish, squish!*

Like an echo I heard *swish, swish* above me. My chin tilted as I searched for the sound. There! Faintly far away, like a cobweb against the sky, the J-line. How fragile and lovely it looked from here. And here below it, I had found three dreams—Mother's in the little bare path, Chis' in the million, million leaves to run on, and Dad's in the dissolving sand. And the three, held together by all the other wonders, was really what mine had been all the time without my knowing it!

With a sigh, I turned back to the water, but the spell was broken. I was suddenly very small at the bottom of a bigness that had forgotten that Man made it. It whispered its arrogant roar down to me—to remind—

I stepped out of the water onto the green, rinsing first one foot and then the other. Clutching my skirts and looking warily back over my shoulders, I scrambled up the steep slope, loosing one hand to help me.

Fear and panic began to build up. Where were the people? Where was movement and humming? The constant eternal humming of wheels starting or stopping, accelerating or decelerating —moving, moving, moving. The only thing I could see that looked anything like life or units was a huddle of small buildings far away—low and little and lonely with sky showing between them.

Suddenly terrified that I might be the only person in the world, I staggered back to the J-line tower, my shadow, thinly tall, slipping up the massed greenery. There was the slab of crete. And there, quietly and quieting, was a small white flower growing up out of the crack as though no one had ever bothered to mark the line of where things could grow and where they mustn't. Without even looking around, I *picked* it! My chin was high and defiant.

A sudden sound lowered my chin and sent me backing into the hanging, swinging green on the tower. I muttered, "Vine," in belated recognition, just as a jerkie rounded the tower and jerked to a stop right in front of me. I pushed the white flower down tight into my pocket. The jerkie door slid. A man stepped out. His brows lifted when he saw me, but he smiled—and went on *looking!* And spoke! And we had never met!

"Want this jerkie?" he asked informally. I could get no words, so I nodded. He pushed the hold button and stepped out. I stumbled at the door and his hand caught my elbow and steadied me.

"Your pardon," he said formally, releasing me. "I trespassed."

"It was permissible," I gasped my part of the expected exchange.

"What J-station?" he asked, showing no awareness that he was asking a personal question.

"Area G," I gulped as though I told my area to any casual questioner. "Where is this?"

"Area G," he repeated and reached in to set the controls. Before I could even repeat my question, the door slid. Through the view-plate I saw his mouth make a word. I thought it looked like Nowhere. How could it be Nowhere? I was jerked abruptly that way. Then this. Then the last jerk onto the J-line. I dropped back against the seat and stared down at my bare, dust streaked feet. I giggled helplessly. Cinderella doubled! Then wonder possessed me and I was back among the green, trying to gather as many rememberings as I could to take home to my family—my waiting, eager family—

I was off-stepping the glide at our complex before the wonder lightened enough for me to start choosing words. Then I was in our unit and babbling the whole thing to my gape-mouthed family, babbling so fast that I didn't make sense even to myself. Dad finally put his hand firmly over my mouth and held me tightly comforting with his other arm until Mother brought me a hush-me and a plastiglass of water. I swallowed obediently.

I leaned against Dad while I calmed. Finally he said, "Guidance has set an appointment for you tomorrow at ten—another Garath."

"It was worth it." I sighed shudderingly and relaxed onto the floor from Dad's arms. I hugged my knees to my chest. "It was worth it."

"But Squelch in the *viewer?*" Chis was admiringly scandalized.

"And no one knowing where you were!" Mother's hand was tight and hot on my shoulder. "School called to ask, and no one knew where you were!"

"Not anyone!" I marveled, realizing all the illegal things I had done without even thinking or caring. "*No* one knew where I was!"

"Out in school hours and you nowhere near twenty-one!" shrilled Chis, brighted to more nearly a boy after being a solid lump of quenchedness for so long.

"Nowhere," I said softly. "That's where I was. Mother, I saw one of those lovely, secret paths through the grass. And I saw an ant running along it, not knowing I was there. It was carrying something. And the green all bent toward me and the wind flowed around me like—like light going somewhere to shine—"

"Where *were* you?" Mother's eyes were wide and dark.

"I was—I was—" I stopped, stricken. "I don't know," I said, a heavy realization tightening inside me. "I have no idea. Not a single idea. Only—only the man said Nowhere. At least it looked like Nowhere through the viewplate."

Dad's mouth twisted. "I imagine that's just exactly where you were," he said. "Nowhere." His eyes told me untruth as plainly as if he had said so.

"No matter what we call it," I cried, "I was there and I saw it—the little bare path—"

Mother's hand left my shoulder and her eyes flashed. "You're unkind to use my own words to cover your truancy—"

"But—" I protested. "I'm not covering. I really did. I saw it. I felt it—a million, million leaves under my feet. And mud between my toes and—" I turned to Dad. "Sand dissolving under my feet in a flowing stream—"

"Enough," said Dad quietly, his face hardening and his eyes not

seeing me any more. "I suggest truthing to the Councilor."

"Honestly! Honestly! I'm truthing!" I cried. "It was just what we are all aching for! Our dreams—"

"We haven't asked you to account for your time," said Father —no longer an informal Dad. "We trust that whatever you did was ethically correct."

"Ethically correct!" Anger surged in me, stung to life by my dissapointment. "Most correct! I pushed a lady to get into a jerkie. I rode the J-line all by myself to Nowhere. I ran barefoot across all the green I could. I squished mud between my toes. I looked at a stranger. And *talked* to him. And I picked—" I scrabbled in my pocket. A moist, greenish-black thread caught under my probing nails. I pulled my hand out and looked. The flower was crushed and dead. Only the tip of one petal curled coolly white from the ruin. "It *was* most secret and most lovely," I whispered forlornly. My fingers cupped the flower protectively out of sight, and I pushed my hand down into my pocket.

Dad turned on the telaworld and reached for the ear. "Don't forget your appointment at ten tomorrow."

"And if I don't choose to remember?" I flared. Three pairs of astonished eyes focused on me. "Why should I go to Guidance?" I asked. "They'll only try to change me—to make me conform! I don't *want* to change! I don't want to conform!" I struggled with breath and tears.

"Let's truth it!" I felt my face pinking with more defiance. "We're non-conform—everyone of us! That's our whole trouble!"

Chis doubled his hands into fists and Mother pinked slowly and painfully. Father just looked at me for a moment, then he said quietly, "Yes, we *are* non-conform. That *is* our problem. But so far we have either truthed it or kept still. Our fantasies we have plainly labeled fantasies—"

"And so have I," I said as quietly as he. "When I *am* fantasing. And *I* think that silence sometimes is the worst kind of untruthing."

I turned away and went to Wardrobe. I undressed hurriedly, clutching my dress back from the renov to rescue the moist mashedness of the white flower.

I was still staring defiantly at the top of my slot when the lulltone finally faded, thinking I was asleep. Then I heard the click of Chis' slot and knew he was above me. Slots are supposed to be completely contained, of course, so that no one intrudes on another, but long ago Chis and I discovered a long thin crack at one end of our slots. We could whisper there and hear each other. Would he? Or did he think me untruthing, too. Or maybe he just didn't care—

Then I heard, "Twixt!" in a voiceless, small explosion. I could picture him twisted all around in his slot because the crack is at his foot. He's a boy and has to take the upper, and it is so old that the bedcovers pull out from only one end, but I can change where I put my head in mine. That week I had changed my pillow to the opposite end.

"Yes?" I breathed back at him, sitting up cautiously to get my mouth closer to the crack.

"It's true, isn't it?" he hissed.

"True," I said flatly.

"With green and water and trees?" His whisper was hungry.

"True," I said. "And little units far away, low, with sky between—"

"There's no J-station like that in two hours around," he breathed back at me.

"There *has* to be!" I felt my whisper threaten to become a voice. "Or else I was farther than that away. I was there. I saw my shadow slide up the J-tower. Up over the green—"

"Twixt!" He almost broke into speaking. "If you saw your shadow in the afternoon, the sun was in back and the J-tower was east—" he fell silent.

East? Whoever uses directions any more except on maps instead of up and down and left and right. You just get the right transport and it goes where you want. And what has east to do with where my shadow was sliding—

Then Chis spoke again, very carefully. "Twixt, where was the river then, the flowing water—left or right?"

"I—I—" I visualized again the slim sliding of such a tall, tall shadow. "Left,' 'I said. "On my left."

There was a brief breathy silence. "Listen, Twixt," his voice was urgent. "I bet I know what happened to you. You know the grid for J-stations? The same distance between, all the time? Well, it isn't always so. Sometimes there's a non-conform off-J in between. No station. Just an off and on for some reason or other. You have to have the destination code 'relse you don't even know there's an off there. You musta punched a non-conform off-J."

"But where is it?" I whispered back. "How'll I ever find it again? Because I'm *going* to find it."

"I'll find it for you," came his confident answer. "I know more about J-lines than anyone in the whole—the whole megapolis! I've hopped more hi-speed freight glides and stowed in more jerkies—"

"Chis!" I was horrified. "Jerkies *alone*? And you're not twelve yet!"

"Twelve!" His voice dismissed the whole idea of rules and permits. "But, Twixt, I think I know where that river is! If it was on your left and you were facing a J-tower in the afternoon—I'll find

it. I'll find it if it takes until—until I'm *twelve!*"

His voice was gone, but I could almost see him so brighted that he shone in the dark! I wasn't very dim myself!

"And he's just stubborn enough to do it," I thought admiringly. "And then we'll bring the J-line destination code to Mother and Dad and *take* them there. *Then* they'll see. They'll believe then. And Dad will put in for locale amends and we'll go! We'll leave this huge external skeleton. We'll be tall, standing there in the green. We'll all strip off our pneumonosoles and—" I hugged myself in delight. "And then foof to you, Engle Faucing! *Fooof*!"

I thumped back down on my pillow, starting the lulltone again. How had *he* got into my dream? I felt the delight melt from my face. The lulltone was a background for my unspoken, mouth-framed words, *Most secret—most lovely*. And I closed my eyes so the wetness wouldn't turn to tears.

Then I hurried back to the wonder, with a twinge of guilt for having roared poor Dad. I had untruthed by silence, myself, drinking that gonky chartreuse just because the other kids did. But I could change now. I felt as though I had split a hard, crippling casing clear up my back. Fresh air was flowing in. I was growing out. At last! Something worth being brighted for! Something to put together day by day until it became a shining, breathing something-else! Oh, wonder! Oh, wonder!

And all we have to do is find Nowhere.

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