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Here is a good strong story with a good strong plot and good strong characters. It carries with it such a degree of conviction that we are half-persuaded that Mr. Roger Zelazny, its author, has himself been a member of the perilous profession of baitman in the perilous seas of Venus. Do not begin this story now unless you can read it right through, ignoring all interuptions.

THE DOORS OF HIS FACE, THE LAMPS OF HIS MOUTH

by Roger Zelazny

I'M A BAITMAN. NO ONE IS BORN a baitman, except in a French novel where everyone is. (In fact, I think that's the title, We are All Bait. Pfft!) How I got that way is barely worth the telling and has nothing to do with neo-exes, but the days of the beast deserve a few words, so here they are.

The Lowlands of Venus lie between the thumb and forefinger of the continent known as Hand. When you break into Cloud Alley it swings its silverblack bowling ball toward you without a warning. You jump then, inside that firetailed tenpin they ride you down in, but the straps keep you from making a fool of yourself. You generally chuckle afterwards, but you always jump first.

Next, you study Hand to lay its

illusion and the two middle fingers become dozen-ringed archipelagoes as the outers resolve into greengray peninsulas; the thumb is too short, and curls like the embryo tail of Cape Horn.

You suck pure oxygen, sigh possibly, and begin the long topple to the Lowlands.

There, you are caught like an infield fly at the Lifeline landing area—so named because of its nearness to the great delta in the Eastern Bay—located between the first peninsula and "thumb". For a minute it seems as if you're going to miss Lifeline and wind up as canned seafood, but afterwards—shaking off the metaphors—you descend to scorched concrete and present your middle-sized telephone directory of authorizations to the short, fat man in the gray

cap. The papers show that you are not subject to mysterious inner rottings and etcetera. He then smiles you a short, fat, gray smile and motions you toward the bus which hauls you to the Reception Area. At the R.A. you spend three days proving that, indeed, you are not subject to mysterious inner rottings and etcetera.

Boredom, however, is another rot. When your three days are up, you generally hit Lifelife hard, and it returns the compliment as a matter of reflex. The effects of alcohol in variant atmospheres is a subject on which the connoisseurs have written numerous volumes, so I will confine my remarks to noting that a good binge is worthy of at least a week's time and often warrants a lifetime study.

I had been a student of exceptional promise (strictly undergraduate) for going on two years when the *Bright Water* fell through our marble ceiling and poured its people like targets into the city.

Pause. The Worlds Almanac re Lifeline: "... Port city on the eastern coast of Hand. Employees of the Agency for Non-terrestrial Research comprise approximately 85% of its 100,000 population (2010 Census). Its other residents are primarily personnel maintained by several industrial corporations engaged in basic research. Independent marine biologists, wealthy fishing enthusiasts,

and waterfront entrepreneurs make up the remainder of its inhabitants."

I turned to Mike Dabis, a fellow entrepreneur, and commented on the lousy state of basic research.

"Not if the mumbled truth be known."

He paused behind his glass before continuing the slow swallowing process calculated to obtain my interest and a few oaths, before he continued.

"Carl," he finally observed, poker playing, "they're shaping Tensquare."

I could have hit him. I might have refilled his glass with sulfuric acid and looked on with glee as his lips blackened and cracked. Instead, I grunted a noncommital.

"Who's fool enough to shell out fifty grand a day? ANR?"

He shook his head.

"Jean Luharich," he said, "the girl with the violet contacts and fifty or sixty perfect teeth. I understand her eyes are really brown."

"Isn't she selling enough face cream these days?"

He shrugged.

"Publicity makes the wheels go round. Luharich Enterprises jumped sixteen points when she picked up the Sun Trophy. You ever play golf on Mercury?"

I had, but I overlooked it and continued to press.

"So she's coming here with a blank check and a fishhook?"

cited.

"Bright Water, today," he nodded. "Should be down by now. Lots of cameras. She wants an Ikky, bad."

"Hmm," I hmmed. "How bad?" "Sixty day contract, Tensquare.

Indefinite extension clause. Million and a half deposit," he re-

"You seem to know a lot about it."

"I'm Personnel Recruitment. Luharich Enterprises approached me last month. It helps to drink in the right places."

"Or own them," he smirked, aft-

er a moment.

I looked away, sipping my bitter brew. After awhile I swallowed several things and asked Mike what he expected to be asked, leaving myself open for his monthly temperance lecture.

"They told me to try getting you," he mentioned. "When's the last time you sailed?"

"Month and a half ago. The Corning."

"Small stuff," he snorted. "When have you been under, yourself?"

"It's been awhile."

"It's been over a year, hasn't it? That time you got cut by the screw, under the Dolphin?"

I turned to him.

"I was in the river last week, up at Angleford where the currents are strong. I can still get around."

"Sober," he added.

"I'd stay that way," I said, "on a job like this."

A doubting nod.

"Straight union rates. Triple time for extraordinary circumstances," he narrated. "Be at Hangar Sixteen with your gear, Friday morning, five hundred hours. We push off Saturday, daybreak."

"You're sailing?"
"I'm sailing."

"How come?"

"Money."
"Ikky guano."

"The bar isn't doing so well and baby needs new minks."

"I repeat---"

"... And I want to get away from baby, renew my contact with basics—fresh air, exercise, make cash"

"All right, sorry I asked."

I poured him a drink, concentrating on H₂SO₄, but it didn't transmute. Finally I got him soused and went out into the night to walk and think things over.

Around a dozen serious attempts to land Ichthyform Leviosaurus Levianthus, generally known as "Ikky", had been made over the past five years. When Ikky was first sighted, whaling techniques were employed. These proved either fruitless or disastrous, and a new procedure was inaugurated. Tensquare was constructed by a wealthy sportsman named Michael Jandt, who blew his entire roll on the project.

After a year on the Eastern

After a year on the Eastern Ocean, he returned to file bankruptcy. Carlton Davits, a playboy fishing enthusiast, then purchased the huge raft and laid a wake for Ikky's spawning grounds. On the nineteenth day out he had a strike and lost one hundred and fifty bills' worth of untested gear, along with one Ichthyform Levianthus. Twelve days later, using tripled lines, he hooked, narcotized, and began to hoist the huge beast. It awakened then, destroyed a control tower, killed six men, and worked general hell over five square blocks of Tensquare. Carlton was left with partial hemiplegia and a bankruptcy suit of his own. He faded into waterfront atmosphere and Tensquare changed hands four more times, with less spectacular but equally expensive results.

Finally, the big raft, built only for one purpose, was purchased at auction by ANR for "marine research." Lloyd's still won't insure it, and the only marine research it has ever seen is an occasional rental at fifty bills a day—to people anxious to tell Leviathan fish stories. I've been baitman on three of the voyages, and I've been close enough to count Ikky's fangs on two occasions. I want one of them to show my grandchildren, for personal reasons.

I faced the direction of the landing area and resolved a resolve.

"You want me for local coloring, gal. It'll look nice on the feature page and all that. But clear this—If anyone gets you an Ikky, it'll be me. I promise."

I stood in the empty Square. The foggy towers of Lifeline shared their mists.

Shoreline a couple eras ago, the above Lifeline slope western stretches as far as forty miles inland in some places. Its angle of rising is not a great one, but it achieves an elevation of several thousand feet before it meets the mountain range which separates us from the Highlands. About four miles inland and five hundred feet higher than Lifeline are set most of the surface airstrips and privately owned hangars. Hangar Sixteen houses Cal's Contract Cab, hop service, shore to ship. I do not like Cal, but he wasn't around when I climbed from the bus and waved to a mechanic.

Two of the hoppers tugged at the concrete, impatient beneath flywing haloes. The one on which Steve was working belched deep within its barrel carbureator and shuddered spasmodically.

"Bellyache?" I inquired.

"Yeah, gas pains and heartburn."

He twisted setscrews until it settled into an even keening, and turned to me.

"You're for out?"

I nodded.

"Tensquare. Cosmetics. Monsters. Stuff like that."

He blinked into the beacons and wiped his freckles. The temperature was about twenty, but the big overhead spots served a double purpose.

"Luharich," he muttered. "Then you *are* the one. There's some people want to see you."

"What about?"

"Cameras. Microphones. Stuff like that."

"I'd better stow my gear. Which one am I riding?"

He poked the screwdriver at the other hopper.

"That one. You're on video tape now, by the way. They wanted to get you arriving."

He turned to the hangar, turned

back.

"Say 'cheese'. They'll shoot the close closeups later."

I said something other than "cheese". They must have been using telelens and been able to read my lips, because that part of the tape was never shown.

I threw my junk in the back, climbed into a passenger seat, and lit a cigarette. Five minutes later, Cal himself emerged from the office Quonset, looking cold. He came over and pounded on the side of the hopper. He jerked a thumb back at the hangar.

"They want you in there!" he called through cupped hands. "Interview!"

"The show's over!" I yelled back.
"Either that, or they can get themselves another baitman!"

His rustbrown eyes became nailheads under blond brows and his glare a spike before he jerked about and stalked off. I wondered how much they had paid him to be able to squat in his hanger and suck juice from his generator. Enough, I guess, knowing Cal.

I never liked the guy, anyway.

Venus at night is a field of sable waters. On the coasts, you can never tell where the sea ends and the sky begins. Dawn is like dumping milk into an inkwell. First, there are erratic curdles of white, then streamers. Shade the bottle for a gray colloid, then watch it whiten a little more. All of a sudden you've got day. Then start heating the mixture.

I had to shed my jacket as we flashed out over the bay. To our rear, the skyline could have been under water for the way it waved and rippled in the heatfall. A hopper can accommodate four people (five, if you want to bend Regs and underestimate weight), three passengers with the sort of gear a baitman uses. I was the only fare, though, and the pilot was like his machine. He hummed and made no unnecessary noises. Lifeline turned a somersault and evaporated in the rear mirror at about the same time Tensquare broke fore-horizon. The stopped humming and shook his head.

I leaned forward. Feelings played flopdoodle in my guts. I knew every bloody inch of the big raft, but the feelings you once took for granted change when their source is out of reach. Truthfully, I'd had my doubts I'd ever board the hulk again. But now, now I could almost believe in predestination. There it was!

A tensquare football field of a ship. A-powered. Flat as a pancake, except for the plastic blisters in the middle and the "Rooks" fore and aft, port and starboard.

The Rook towers were named for their corner positions—and any two can work together to hoist, co-powering the graffles between them. The graffles—half gaff, half grapple—can raise enormous weights to near water level; their designer had only one thing in mind, though, which accounts for the gaff half. At water level, the Slider has to implement elevation for six to eight feet before the graffles are in a position to push upward, rather than pulling.

The Slider, essentially, is a mobile room—a big box capable of moving in any of Tensquare's crisscross groovings and "anchoring" on the strike side by means of a powerful electromagnetic bond. Its winches could hoist a battleship the necessary distance, and the whole craft would tilt, rather than the Slider come loose, if you want any idea of the strength of that bond.

The Slider houses a section operated control indicator which is the most sophisticated "reel" ever designed. Drawing broadcast power from the generator beside the center blister, it is connected by shortwave with the sonar room, where the movements of the quarry are recorded and repeated to the angler seated before the section control.

The fisherman might play his "lines" for hours, days even, without seeing any more than metal and an outline on the screen. Only when the beast is graffled and the extensor shelf, located twelve feet below waterline, slides out for support and begins to aid the winches, only then does the fisherman see his catch rising before him like a fallen Seraphim. Then, as Davits learned, one looks into the Abyss itself and is required to act. He didn't, and a hundred meters of unimaginable tonnage, undernarcotized and hurting, broke the cables of the winch, snapped a graffle, and took a half-minute walk across Tensquare.

We circled till the mechanical flag took notice and waved us on down. We touched beside the personnel hatch and I jettisoned my gear and jumped to the deck.

"Luck," called the pilot as the door was sliding shut. Then he danced into the air and the flag clicked blank.

I shouldered my stuff and went below.

Signing in with Malvern, the de facto captain, I learned that most of the others wouldn't arrive for a good eight hours. They had wanted

me alone at Cal's so they could pattern the pub footage along twentieth-century cinema lines. Open: landing strip, dark. One

mechanic prodding a contrary hopper. Stark-o-vision shot of slow bus pulling in. Heavily dressed baitman descends, looks about, limps across field. Closeup: he grins. Move in for words: "Do you think this is the time? The time he will be landed?" Embarrassment. taciturnity, a shrug. Dub something.—"I see. And why do you think Miss Luharich has a better chance than any of the others? Is it because she's better equipped? [Grin.] Because more is known now about the creature's habits than when you were out before? Or is it because of her will to win. to be a champion? Is it any one of these things, or is it all of them?" Reply: "Yeah, all of them."—"Is that why you signed on with her? Because your instincts say, 'This one will be it'?" Answer: "She pays union rates. I couldn't rent that damned thing myself. And I want in." Erase. Dub something else. Fadeout as he moves toward

"Cheese," I said, or something like that, and took a walk around Tensquare, by myself.

hopper, etcetera.

I mounted each Rook, checking out the controls and the underwater video eyes. Then I raised the main lift.

Malvern had no objections to my testing things this way. In fact,

he encouraged it. We had sailed together before and our positions had even been reversed upon a time. So I wasn't surprised when I stepped off the lift into the Hopkins Locker and found him waiting. For the next ten minutes we inspected the big room in silence, walking through its copper coil chambers soon to be Arctic.

Finally, he slapped a wall.

"Well, will we fill it?" I shook my head.

"I'd like to, but I doubt it. I don't give two hoots and a damn who gets credit for the catch, so long as I have a part in it. But it won't happen. That gal's an egomaniac. She'll want to operate the Slider, and she can't."

"You ever meet her?"

"Yeah."

"How long ago?"

"Four, five years."

"She was a kid then. How do you know what she can do now?" "I know. She'll have learned ev-

ery switch and reading by this time. She'll be up on all the theory. But do you remember one time we were together in the starboard Rook, forward, when Ikky broke water like a porpoise?"

"How could I forget?"

"Well?"

He rubbed his emery chin.

"Maybe she can do it, Carl. She's raced torch ships and she's scubaed in bad waters back home." He glanced in the direction of invisible Hand. "And she's hunted in the Highlands. She might be wild enough to pull that horror into her lap without flinching.

"... For Johns Hopkins to foot the bill and shell out seven figures for the corpus," he added. "That's money, even to a Luharich."

I ducked through a hatchway.

"Maybe you're right, but she was a rich witch when I knew her.

"And she wasn't blonde," I added, meanly.

He yawned.

"Let's find breakfast."

We did that.

When I was young I thought that being born a sea creature was the finest choice Nature could make for anyone. I grew up on the Pacific coast and spent my summers on the Gulf or the Mediterranean. I lived months of my life negotiating coral, photographing trench dwellers, and playing tag with dolphins. I fished everywhere there are fish, resenting the fact that they can go places I can't. When I grew older I wanted bigger fish, and there was nothing living that I knew of, excepting a Sequoia, that came any bigger than Ikky. That's part of it . . .

I jammed a couple extra rolls into a paper bag and filled a thermos with coffee. Excusing myself, I left the galley and made my way to the Slider berth. It was just the way I remembered it. I threw a few switches and the shortwave hummed.

"That you, Carl?"

"That's right, Mike. Let me have some juice down here, you doublecrossing rat."

He thought it over, then I felt the hull vibrate as the generators cut in. I poured my third cup of coffee and found a cigarette.

"So why am I a doublecrossing rat this time?" came his voice again.

"You knew about the cameramen at Hangar Sixteen?"

"Yes."

"Then you're a doublecrossing rat. The last thing I want is publicity. 'He who fouled up so often before is ready to try it, nobly, once more.' I can read it now."

"You're wrong. The spotlight's only big enough for one, and she's prettier than you."

My next comment was cut off as I threw the elevator switch and the elephant ears flapped above me. I rose, settling flush with the deck. Retracting the lateral rail, I cut forward into the groove. Amidships, I stopped at a juncture, dropped the lateral, and retracted the longitudinal rail.

I slid starboard, midway between the Rooks, halted, and threw on the coupler.

I hadn't spilled a drop of coffee.

"Show me pictures."

The screen glowed. I adjusted and got outlines of the bottom.

"Okay."

I threw a Status Blue switch and he matched it. The light went on.

The winch unlocked. I aimed out over the waters, extended the arm, and fired a cast.

"Clean one," he commented.

"Status Red. Call strike." threw a switch.

"Status Red."

The baitman would be on his way with this, to make the barbs tempting.

It's not exactly a fishhook. The cables bear hollow tubes, the tubes convey enough dope for an army of hopheads, Ikky takes the bait, dandled before him by remote control, and the fisherman rams the barbs home.

My hands moved over the console, making the necessary adjustments. I checked the narco-tank reading. Empty. Good, they hadn't been filled yet. I thumbed the Inject button.

"In the gullet," Mike murmured. I released the cables. I played

the beast imagined. I let him run, swinging the winch to simulate his sweep.

I had the air conditioner on and my shirt off and it was still uncomfortably hot, which is how I knew that morning had gone over into noon. I was dimly aware of the arrivals and departures of the hoppers. Some of the crew sat in the "shade" of the doors I had left open, watching the operation. I didn't see Jean arrive or I would have ended the session and gotten below.

She broke my concentration by

slamming the door hard enough to shake the bond.

"Mind telling me who authorized you to bring up the Slider?" she asked.

"No one," I replied. "I'll take it below now."

"Just move aside."

I did, and she took my seat. She was wearing brown slacks and a baggy shirt and she had her hair pulled back in a practical manner. Her cheeks were flushed, but not necessarily from the heat. She attacked the panel with a nearly amusing intensity that I found disquieting.

"Status Blue," she snapped, breaking a violet fingernail on the

toggle.

I forced a yawn and buttoned my shirt slowly. She threw a side glance my way, checked the registers, and fired a cast.

I monitored the lead on the screen. She turned to me for a second.

"Status Red," she said levelly.

I nodded my agreement.

She worked the winch sideways to show she knew how. I didn't doubt she knew how and she didn't doubt that I didn't doubt, but then—

"In case you're wondering," she said, "you're not going to be anywhere near this thing. You were hired as a baitman, remember? Not a Slider operator! A baitman! Your duties consist of swimming out and setting the table for our friend

the monster. It's dangerous, but you're getting well paid for it. Any questions?"

She squashed the Inject button and I rubbed my throat.

"Nope," I smiled, "but I am qualified to run that thingamajigger—and if you need me I'll be available, at union rates."

"Mister Davits," she said, "I don't want a loser operating this panel."

"Miss Luharich, there has never been a winner at this game."

She started reeling in the cable and broke the bond at the same time, so that the whole Slider shook as the big yo-yo returned. We skidded a couple feet backwards as it curled into place, and she retracted the arm. She raised the laterals and we shot back along the groove. Slowing, she transferred rails and we jolted to a clanging halt, then shot off at a right angle. The crew scrambled away from the hatch as we skidded onto the elevator.

"In the future, Mister Davits, do not enter the Slider without being ordered," she told me.

"Don't worry. I won't even step inside if I am ordered," I answered. "I signed on as a baitman. Remember? If you want me in here, you'll have to ask me."

"That'll be the day," she smiled.

I agreed, as the doors closed above us. We dropped the subject and headed in our different directions after the Slider came to a halt

in its berth. She did say "good day," though, which I thought showed breeding as well as determination, in reply to my chuckle.

Later that night Mike and I stoked our pipes in Malvern's cabin. The winds were shuffling waves, and a steady spattering of rain and hail overhead turned the deck into a tin roof.

"Nasty," suggested Malvern.

I nodded. After two bourbons the room had become a familiar woodcut, with its mahogany furnishings (which I had transported from Earth long ago on a whim) and the dark walls, the seasoned face of Malvern, and the perpetually puzzled expression of Dabis set between the big pools of shadow that lay behind chairs and splashed in corners, all cast by the tiny table light and seen through a glass, brownly.

"Glad I'm in here."

"What's it like underneath on a night like this?"

I puffed, thinking of my light cutting through the insides of a black diamond, shaken slightly. The meteor-dart of a suddenly illuminated fish, the swaying of grotesque ferns, like nebulae—shadow, then green, then gone—swam in a moment through my mind. I guess it's like a spaceship would feel, if a spaceship could feel, crossing between worlds—and quiet, uncannily, preternaturally quiet; and peaceful as sleep.

"Dark," I said, "and not real choppy below a few fathoms."

"Another eight hours and we shove off," commented Mike.

"Ten, twelve days, we should be there " noted Malvern

there," noted Malvern.
"What do you think Ikky's doing?"

"Sleeping on the bottom with Mrs. Ikky, if he has any brains."

"He hasn't. I've seen ANR's skeletal extrapolation from the bones that have washed up—"

"Hasn't everyone?"

"... Fully fleshed, he'd be over a hundred meters long. That right, Carl?"

I agreed.

". . . Not much of a brain box, though, for his bulk."

"Smart enough to stay out of our locker."

Chuckles, because nothing exists but this room, really. The world outside is an empty, sleet-drummed deck. We lean back and make clouds.

"Boss lady does not approve of unauthorized fly fishing."

"Boss lady can walk north till her hat floats."

"What did she say in there?"

"She told me that my place, with fish manure, is on the bottom."

"You don't Slide?"

"I bait."

"We'll see."

"That's all I do. If she wants a Slideman she's going to have to ask nicely."

"You think she'll have to?"

"I think she'll have to."

"And if she does, can you do it?"

"A fair question," I puffed. "I don't know the answer, though."

I'd incorporate my soul and trade forty percent of the stock for the answer. I'd give a couple years off my life for the answer. But there doesn't seem to be a lineup of supernatural takers, because no one knows. Supposing when we get out there, luck being with us, we find ourselves an Ikky? Supposing we succeed in baiting him and get lines on him. What then? If we get him shipside will she hold on or crack up? What if she's made of sterner stuff than Davits, who used to hunt sharks with poisondarted air pistols? Supposing she lands him and Davits has to stand there like a video extra.

Worse yet, supposing she asks for Davits and he still stands there like a video extra or something else—say, some yellowbellied embodiment named Cringe?

It was when I got him up above the eight-foot horizon of steel and looked out at all that body, sloping on and on till it dropped out of sight like a green mountain range . . . And that head. Small for the body, but still immense. Flat, craggy, with lidless roulettes that had spun black and red since before my forefathers decided to try the New Continent. And swaying.

Fresh narco-tanks had been connected. It needed another shot, fast. But I was paralyzed.

It had made a noise like God playing a Hammond organ . . .

And looked at me!

I don't know if seeing is even the same process in eyes like those. I doubt it. Maybe I was just a gray blur behind a black rock, with the plexi-reflected sky hurting its pupils. But it fixed on me. Perhaps the snake doesn't really paralyze the rabbit, perhaps it's just that rabbits are cowards by constitution. But it began to struggle and I still couldn't move, fascinated.

Fascinated by all that power, by those eyes, they found me there fifteen minutes later, a little broken about the head and shoulders, the Inject still unpushed.

And I dream about those eyes. I want to face them once more, even if their finding takes forever. I've got to know if there's something inside me that sets me apart from a rabbit, from notched plates of reflexes and instincts that always fall apart in exactly the same way whenever the proper combination is spun.

Looking down, I noticed that my hand was shaking. Glancing up, I noticed that no one else was noticing.

I finished my drink and emptied my pipe. It was late and no songbirds were singing.

I sat whittling, my legs hanging over the aft edge, the chips spinning down into the furrow of our wake. Three days out. No action. "You!"
"Me?"

"You."

Hair like the end of the rainbow, eyes like nothing in nature, fine teeth.

"Hello."

"There's a safety rule against what you're doing, you know."

"I know. I've been worrying about it all morning."

A delicate curl climbed my knife then drifted out behind us. It settled into the foam and was plowed under. I watched her reflection in my blade, taking a secret pleasure in its distortion.

"Âre you baiting me?" she finally

asked.

I heard her laugh then, and turned, knowing it had been intentional.

"What, me?"

"I could push you off from here, very easily."

"I'd make it back."

"Would you push me off, then —some dark night, perhaps?"

"They're all dark, Miss Luharich. No, I'd rather make you a gift of my carving."

She seated herself beside me then, and I couldn't help but notice the dimples in her knees. She wore white shorts and a halter and still had an offworld tan to her which was awfully appealing. I almost felt a twinge of guilt at having planned the whole scene, but my right hand still blocked her view of the wooden animal.

"Okay, I'll bite. What have you got for me?"

"Just a second. It's almost finished."

Solemnly, I passed her the wooden jackass I had been carving. I felt a little sorry and slightly jackass-ish myself, but I had to follow through. I always do. The mouth was split into a braying grin. The ears were upright.

She didn't smile and she didn't frown. She just studied it.

"It's very good," she finally said, "like most things you do—and appropriate, perhaps."

"Give it to me." I extended a

palm.

She handed it back and I tossed it out over the water. It missed the white water and bobbed for awhile like a pigmy seahorse.

"Why did you do that?"

"It was a poor joke. I'm sorry."
"Maybe you are right, though.

Perhaps this time I've bitten off a little too much."

I snorted.

"Then why not do something safer, like another race?"

She shook her end of the rainbow.

"No. It has to be an Ikky."

"Why?"

"Why did you want one so badly that you threw away a fortune?"

"Man reasons," I said. "An unfrocked analyst who held black therapy sessions in his basement once told me, 'Mister Davits, you need to reinforce the image of your masculinity by catching one of every kind of fish in existence.' Fish are a very ancient masculinity symbol, you know. So I set out to do it. I have one more to go.—Why do you want to reinforce your masculinity?"

"I don't," she said. "I don't want to reinforce anything but Luharich Enterprises. My chief statistician once said, 'Miss Luharich, sell all the cold cream and face powder in the System and you'll be a happy girl. Rich, too.' And he was right. I am the proof. I can look the way I do and do anything, and I sell most of the lipstick and face powder in the System—but I have to be able to do anything."

"You do look cool and efficient," I observed.

"I don't feel cool," she said, rising. "Let's go for a swim."

"May I point out that we are making pretty good time?"

"If you want to indicate the obvious, you may. You said you could make it back to the ship, unassisted. Change your mind?"

"No."

"Then get us two scuba outfits and I'll race you under Tensquare.

"I'll win, too," she added.

I stood and looked down at her, because that usually makes me feel superior to women.

"Daughter of Lir, eyes of Picasso," I said, "you've got yourself a race. Meet me at the forward Rook, starboard, in ten minutes." "Ten minutes," she agreed.

And ten minutes it was. From the center blister to the Rook took maybe two of them, with the load I was carrying. My sandals grew very hot and I was glad to shuck them for flippers when I reached the comparative cool of the corner.

We slid into harnesses and adjusted our gear. She had changed into a trim one-piece green job that made me shade my eyes and look away, then look back again.

I fastened a rope ladder and kicked it over the side. Then I pounded on the wall of the Rook.

"Yeah?"

"You talk to the port Rook, aft?" I called.

"They're all set up," came the answer. "There's ladders and draglines all over that end."

"You sure you want to do this?" asked the sunburnt little gink who was her publicity man, Anderson yclept.

He sat beside the Rook in a deckchair, sipping lemonade through a straw.

"It might be dangerous," he observed, sunken-mouthed. (His teeth were beside him, in another glass.)

"That's right," she smiled. "It will be dangerous. Not overly, though."

"Then why don't you let me get some pictures? We'd have them back to Lifeline in an hour. They'd be in New York by tonight. Good copy." "No," she said, and turned away from both of us.

She raised her hands to her eyes.

"Here, keep these for me."

She passed him a box full of her unseeing, and when she turned back to me they were the same brown that I remembered.

"Ready?"

"No," I said, tautly. "Listen carefully, Jean. If you're going to play this game there are a few rules. First," I counted, "we're going to be directly beneath the hull, so we have to start low and keep moving. If we bump the bottom, we could rupture an air tank

She began to protest that any moron knew that and I cut her down.

"Second," I went on, "there won't be much light, so we'll stay close together and we will both carry torches."

Her wet eyes flashed.

"I dragged you out of Govino without—"

Then she stopped and turned away. She picked up a lamp.

"Okay. Torches. Sorry."

". . . And watch out for the drive-screws," I finished. "There'll be strong currents for at least fifty meters behind them."

She wiped her eyes again and adjusted the mask.

"All right, let's go."

We went.

She led the way, at my insist-

ence. The surface layer was pleasantly warm. At two fathoms the water was bracing; at five it was nice and cold. At eight we let go the swinging stairway and struck out. Tensquare sped forward and we raced in the opposite direction, tattooing the hull yellow at tensecond intervals.

The hull stayed where it belonged, but we raced on like two darkside satellites. Periodically, I tickled her frog feet with my light and traced her antennae of bubbles. About a five meter lead was fine; I'd beat her in the home stretch, but I couldn't let her drop behind yet.

Beneath us, black. Immense. Deep. The Mindanao of Venus, where eternity might eventually pass the dead to a rest in cities of unnamed fishes. I twisted my head away and touched the hull with a feeler of light; it told me we were about a quarter of the way along.

I increased my beat to match her stepped-up stroke, and narrowed the distance which she had suddenly opened by a couple meters. She sped up again and I did, too. I spotted her with my beam.

She turned and it caught on her mask. I never knew whether she'd been smiling. Probably. She raised two fingers in a V-for-Victory and then cut ahead at full speed.

I should have known. I should have felt it coming. It was just a race to her, something else to win. Damn the torpedoes!

So I leaned into it, hard. I don't shake in the water. Or, if I do it doesn't matter and I don't notice it. I began to close the gap again.

She looked back, sped on, looked back. Each time she looked I was nearer, until I'd narrowed it down to the original five meters.

Then she hit the jatoes.

That's what I had been fearing. We were about halfway under and she shouldn't have done it. The powerful jets of compressed air could easily rocket her upward into the hull, or tear something loose if she allowed her body to twist. Their main use is in tearing free from marine plants or fighting bad currents. I had wanted them along as a safety measure, because of the big suck-and-pull windmills behind.

She shot ahead like a meteorite, and I could feel a sudden tingle of perspiration leaping to meet and mix with the churning waters.

I swept ahead, not wanting to use my own guns, and she tripled, quadrupled the margin.

The jets died and she was still on course. Okay, I was an old fuddyduddy. She *could* have messed up and headed toward the top.

I plowed the sea and began to gather back my yardage, a foot at a time. I wouldn't be able to catch her or beat her now, but I'd be on the ropes before she hit deck.

Then the spinning magnets began their insistence and she wavered. It was an awfully powerful drag, even at this distance. The call of the meat grinder.

I'd been scratched up by one once, under the Dolphin, a fishing boat of the middle-class. I had been drinking, but it was also a rough day, and the thing had been turned on prematurely. Fortunately, it was turned off in time, also, and a tendon-stapler made everything good as new, except in the log, where it only mentioned that I'd been drinking. Nothing about it being off-hours when I had a right to do as I damn well pleased.

She had slowed to half her speed, but she was still moving crosswise, toward the port, aft corner. I began to feel the pull myself and had to slow down. She'd made it past the main one, but she seemed too far back. It's hard to gauge distances under water, but each red beat of time told me I was right. She was out of danger from the main one, but the smaller port screw, located about eighty meters in, was no longer a threat but a certainty.

Each air bubble carried a curse to daylight as I moved to flank her from the left.

She had turned and was pulling away from it now. Twenty meters separated us. She was standing still. Fifteen.

Slowly, she began a backward drifting. I hit my jatoes, aiming two meters behind her and about twenty back of the blades.

Straightline! Thankgod! Catch-

ing, softbelly, leadpipe on shoulder SWIMLIKEHELL! maskcracked, not broke though AND UP!

We caught a line and I remember brandy.

Into the cradle endlessly rocking I spit, pacing. Insomnia tonight and left shoulder sore again, so let it rain on me-they can cure rheumatism. Stupid as hell. What I said. In blankets and shivering. She: "Carl, I can't say it." Me: "Then call it square for that night in Govino, Miss Luharich, Huh?" She: nothing. Me: "Any more of that brandy?" She: "Give me another, too." Me: sounds of sipping. It had only lasted three months. No alimony. Many \$ on both sides. Not sure whether they were happy or not. Wine-dark Aegean, Good fishing. Maybe he should have spent more time on shore. Or perhaps she shouldn't have. Good swimmer, though. Dragged him all the way to Vido to wring out his lungs. Young. Both. Strong. Both. Rich and spoiled as hell. Ditto. Corfu should have brought them closer. Didn't. I think that mental cruelty was a trout. He wanted to go to Canada. She: "Go to hell if you want!" He: "Will you go along?" She: "No." But she did. anyhow. Many hells. Expensive. He lost a monster or two. She inherited a couple. Lot of lightning tonight. Stupid as hell. Civility's the coffin of a conned soul. By whom?—Sounds like a bloody

neo-ex . . . But I hate you, Anderson, with your glass full of teeth and her new eyes . . . Can't keep this pipe lit, keep sucking to-bacco. Spit again!

Seven days out and the scope showed Ikky.

Bells jangled, feet pounded, and some optimist set the thermostat in the Hopkins. Malvern wanted me to sit it out, but I slipped into my harness and waited for whatever came. The bruise looked worse than it felt. I had exercised every day and the shoulder hadn't stiffened on me.

A thousand meters ahead and thirty fathoms deep, it tunneled our path. Nothing showed on the surface.

"Will we chase him?" asked an excited crewman.

"Not unless she feels like using money for fuel," I shrugged.

Soon the scope was clear, and it stayed that way. We remained on alert and held our course.

I hadn't said over a dozen words to my boss since the last time we went drowning together, so I decided to raise the score.

"Good afteroon," I approached. "What's new?"

"He's going north-northeast. We'll have to let this one go. A few more days and we can afford some chasing. Not yet."

Sleek head . . .

I nodded. "No telling where this one's headed."

"How's your shoulder?"
"All right. How about you?"

Daughter of Lir . . .

"Fine. By the way, you're down for a nice bonus."

Eyes of perdition!

"Don't mention it," I told her back.

Later that afternoon, and appropriately, a storm shattered. (I prefer "shattered" to "broke". It gives a more accurate idea of the behavior of tropical storms on Venus and saves lots of words.) Remember that inkwell I mentioned earlier? Now take it between thumb and forefinger and hit its side with a hammer. Watch yourself! Don't get splashed or cut—

Dry, then drenched. The sky one million bright fractures as the hammer falls. And sounds of breaking.

"Everyone below!" suggested loudspeakers to the already scurrying crew.

Where was I? Who do you think was doing the loudspeaking?

Everything loose went overboard when the water got to walking, but by then no people were loose. The Slider was the first thing below decks. Then the big lifts lowered their shacks.

I had hit it for the nearest Rook with a yell the moment I recognized the pre-brightening of the holocaust. From there I cut in the speakers and spent half a minute coaching the track team.

Minor injuries had occurred,

Mike told me over the radio, but nothing serious. I, however, was marooned for the duration. The Rooks do not lead anywhere; they're set too far out over the hull to provide entry downwards, what with the extensor shelves below.

So I undressed myself of the tanks which I had worn for the past several hours, crossed my flippers on the table, and leaned back to watch the hurricane. The top was black as the bottom and we were in between, and somewhat illuminated because of all that flat, shiny space. The waters above didn't rain down—they just sort of got together and dropped.

The Rooks were secure enough—they'd weathered any number of these onslaughts—it's just that their positions gave them a greater arc of rise and descent when Tensquare makes like the rocker of a very nervous grandma. I had used the belts from my rig to strap myself into the bolted-down chair, and I removed several years in purgatory from the soul of whoever left a pack of cigarettes in the table drawer.

I watched the water make teepees and mountains and hands and trees until I started seeing faces and people. So I called Mike.

"What are you doing down there?"

"Wondering what you're doing up there," he replied. "What's it like?"

"You're from the midwest, aren't

you?"

"Yeah."

"Get bad storms out there?"

"Sometimes."

"Try to think of the worst one you were ever in. Got a slide rule handy?"

"Right here."

"Then put a one under it, imagine a zero or two following after, and multiply the thing out."

"I can't imagine the zeroes."

"Then retain the multiplicand —that's all you can do."

"So what are you doing up there?"

"I've strapped myself in the chair. I'm watching things roll around the floor right now."

I looked up and out again. I saw one darker shadow in the forest.

"Are you praying or swearing?"
"Damned if I know. But if this were the Slider—if only this were the Slider!"

"He's out there?"

I nodded, forgetting that he couldn't see me.

Big, as I remembered him. He'd only broken surface for a few moments, to look around. There is no power on Earth that can be compared with him who was made to fear no one. I dropped my cigarette. It was the same as before. Paralysis and an unborn scream.

"You all right, Carl?"

He had looked at me again. Or seemed to. Perhaps that mindless brute had been waiting half a millenium to ruin the life of a member of the most highly developed species in business . . .

"You okay?"

. . . Or perhaps it had been ruined already, long before their encounter, and theirs was just a meeting of beasts, the stronger bumping the weaker aside, body to psyche . . .

"Carl, dammit! Say something!"

He broke again, this time nearer. Did you ever see the trunk of a tornado? It seems like something alive, moving around in all that dark. Nothing has a right to be so big, so strong, and moving. It's a sickening sensation.

"Please answer me."

He was gone and did not come back that day. I finally made a couple wisecracks at Mike, but I held my next cigarette in my right hand.

The next seventy or eighty thousand waves broke by with a monotonous similarity. The five days that held them were also without distinction. The morning of the thirteenth day out, though, our luck began to rise. The bells broke our coffee-drenched lethargy into small pieces, and we dashed from the galley without hearing what might have been Mike's finest punchline.

"Aft!" cried someone "Five hun-

"Aft!" cried someone. "Five hundred meters!"

I stripped to my trunks and started buckling. My stuff is always within grabbing distance.

I flipflopped across the deck, girding myself with a deflated squiggler.

"Five hundred meters twenty

"Five hundred meters, twenty fathoms!" boomed the speakers.

The big traps banged upward and the Slider grew to its full height, m'lady at the console. It rattled past me and took root ahead. Its one arm rose and lengthened.

I breasted the Slider as the speakers called, "Four-eighty, twenty!"

"Status Red!"

A belch like an emerging champagne cork and the line arced high over the waters.

"Four-eighty, twenty!" it repeated, all Malvern and static. "Baitman, attend!"

I adjusted my mask and handover-handed it down the side. Then warm, then cool, then away.

Green, vast, down. Fast. This is the place where I am equal to a squiggler. If something big decides a baitman looks tastier than what he's carrying, then irony colors his title as well as the water about it.

I caught sight of the drifting cables and followed them down. Green to dark green to black. It had been a long cast, too long. I'd never had to follow one this far down before. I didn't want to switch on my torch.

But I had to.

Bad! I still had a long way to go. I clenched my teeth and stuffed my imagination into a straitjacket.

Finally the line came to an end. I wrapped one arm about it and unfastened the squiggler. I attached it, working as fast as I could, and plugged in the little insulated connections which are the reason it can't be fired with the line. Ikky could break them, but by then it wouldn't matter.

My mechanical eel hooked up, I section plugs its watched it grow. I had been dragged deeper during this operation, which took about a minute and a half. I was near-too nearto where I never wanted to be.

Loathe as I had been to turn on my light, I was suddenly afraid to turn it off. Panic gripped me and I seized the cable with both hands. The squiggler began to glow, pinkly. It started to twist. It was twice as big as I am and doubtless twice as attractive to pink squiggler-eaters. I told myself this until I believed it, then I switched off my light and started up.

If I bumped into something enormous and steel-hided my heart had orders to stop beating immediately and release me-to dart fitfully forever along Acheron, and gibbering.

Ungibbering, I made it to green water and fled back to the nest.

As soon as they hauled me aboard I made my mask a necklace, shaded my eyes, and monitored for surface turbulence. My first question, of course, was: "Where is he?"

"Nowhere," said a crewman, "we lost him right after you went over. Can't pick him up on the scope now. Musta dived."

"Too bad."

The squiggler staved down, enjoying its bath. My job ended for the time being, I headed back to warm my coffee with rum.

From behind me, a whisper: "Could you laugh like that after-

wards?"

Perceptive Answer: "Depends on what he's laughing at."

Still chuckling, I made my way into the center blister with two cupfuls.

"Still hell and gone?"

Mike nodded. His big hands were shaking, and mine were steady as a surgeon's when I set down the cups.

He jumped as I shrugged off the tanks and looked for a bench.

"Don't drip on that panel! You want to kill yourself and blow expensive fuses?"

I towelled down, then settled down to watching the unfilled eye on the wall. I yawned happily; my shoulder seemed good as new.

The little box that people talk through wanted to say something, so Mike lifted the switch and told it to go ahead.

"Is Carl there, Mister Dabis?"

"Yes, ma'am."

"Then let me talk to him."

Mike motioned and I moved.

"Talk," I said.

"Are you all right?"

"Yes, thanks. Shouldn't I be?"
"That was a long swim. I—I guess I overshot my cast."

"I'm happy," I said. "More tripletime for me. I really clean up on that hazardous duty clause."

"I'll be more careful next time," she apologized. "I guess I was too eager. Sorry—" Something happened to the sentence, so she ended it there, leaving me with half a bagfull of replies I'd been saving.

I lifted the cigarette from behind Mike's ear and got a light from the one in the ashtray.

"Carl, she was being nice," he said, after turning to study the panels.

"I know," I told him. "I wasn't."

"I mean, she's an awfully pretty kid, pleasant. Headstrong and all that. But what's she done to you?"

"Lately?" I asked.

He looked at me, then dropped his eyes to his cup.

"I know it's none of my bus—" he began.

"Cream and sugar?"

Ikky didn't return that day, or that night. We picked up some Dixieland out of Lifeline and let the muskrat ramble while Jean had her supper sent to the Slider. Later she had a bunk assembled inside. I piped in "Deep Water Blues" when it came over the air and waited for her to call up and cuss us out. She didn't, though, so I decided she was sleeping.

Then I got Mike interested in a game of chess that went on until daylight. It limited conversation to several "checks", one "checkmate", and a "damn!" Since he's a poor loser it also effectively sabatoged subsequent talk, which was fine with me. I had a steak and fried potatoes for breakfast and went to bed.

Ten hours later someone shook me awake and I propped myself on one elbow, refusing to open my eves.

"Whassamadder?"

"I'm sorry to get you up," said one of the younger crewmen, "but Miss Luharich wants you to disconnect the squiggler so we can move on."

I knuckled open one eye, still deciding whether I should be amused.

"Have it hauled to the side. Anyone can disconnect it."

"It's at the side now, sir. But she said it's in your contract and we'd better do things right."

"That's very considerate of her. I'm sure my Local appreciates her remembering."

"Uh, she also said to tell you to change your trunks and comb your hair, and shave, too. Mister Anderson's going to film it."

"Okay. Run along, tell her I'm on my way—and ask if she has some toenail polish I can borrow."

I'll save on details. It took three minutes in all, and I played it properly, even pardoning myself

when I slipped and bumped into Anderson's white tropicals with the wet squiggler. He smiled, brushed it off; she smiled, even though Luharich Complectacolor couldn't completely mask the dark circles under her eyes; and I smiled, waving to all our fans out there in videoland.—Remember, Mrs. Universe, you, too, can look like a monster-catcher. Just use Luharich facecream.

I went below and made myself a tuna sandwich, with mayonnaise.

Two days like icebergs—bleak, blank, half-melting, all frigid, mainly out of sight, and definitely a threat to peace of mind—drifted by and were good to put behind. I experienced some old guilt feelings and had a few disturbing dreams. Then I called Lifeline and checked my bank balance.

"Going shopping?" asked Mike, who had put the call through for me.

"Going home," I answered.

"Huh?"

"I'm out of the baiting business after this one, Mike. The Devil with Ikky! The Devil with Venus and Luharich Enterprises! And the Devil with you!"

Up eyebrows.

"What brought that on?"

"I waited over a year for this job. Now that I'm here, I've decided the whole thing stinks."

"You knew what it was when you signed on. No matter what else you're doing, you're selling facecream when you work for facecream sellers."

"Oh, that's not what's biting me. I admit the commercial angle irritates me, but Tensquare has always been a publicity spot, ever since the first time it sailed."

"What, then?"

"Five or six things, all added up. The main one being that I don't care any more. Once it meant more to me than anything else to hook that critter, and now it doesn't. I went broke on what started out as a lark and I wanted blood for what it cost me. Now I realize that maybe I had it coming. I'm beginning to feel sorry for Ikky."

"And you don't want him now?"
"I'll take him if he comes peacefully, but I don't feel like sticking
out my neck to make him crawl
into the Hopkins."

"I'm inclined to think it's one of the four or five other things you said you added."

"Such as?"

He scrutinized the ceiling.

I growled.

"Okay, but I won't say it, not just to make you happy you guessed right."

He, smirking: "That look she

wears isn't just for Ikky."

"No good, no good," I shook my head. "We're both fission chambers by nature. You can't have jets on both ends of the rocket and expect to go anywhere—what's in the middle just gets smashed."

"That's how it was. None of my business, of course—"

"Say that again and you'll say it without teeth."

"Any day, big man," he looked up, "any place . . ."

"So go ahead. Get it said!"

"She doesn't care about that bloody reptile, she came here to drag you back where you belong. You're not the baitman this trip."

"Five years is too long."

"There must be something under that cruddy hide of yours that people like," he muttered, "or I wouldn't be talking like this. Maybe you remind us humans of some really ugly dog we felt sorry for when we were kids. Anyhow, someone wants to take you home and raise you—also, something about beggars not getting menus."

"Buddy," I chuckled, "do you know what I'm going to do when I hit Lifeline?"

"T ----

"I can guess."

"You're wrong. I'm torching it to Mars, and then I'll cruise back home, first class. Venus bankruptcy provisions do not apply to Martian trust funds, and I've still got a wad tucked away where moth and corruption enter not. I'm going to pick up a big old mansion on the Gulf, and if you're ever looking for a job you can stop around and open bottles for me."

"You are a yellowbellied fink," he commented.

"Okay," I admitted, "but it's her I'm thinking of, too."

"I've heard the stories about you both," he said. "So you're a heel and a goofoff and she's a bitch. That's called compatibility these days. I dare you, baitman, try keeping something you catch."

I turned.

"If you ever want that job, look me up."

I closed the door quietly behind

me and left him sitting there waiting for it to slam.

The day of the beast dawned like any other. Two days after my gutless flight from empty waters I went down to rebait. Nothing on the scope. I was just making things ready for the routine attempt.

I hollered a "good morning" from outside the Slider and received an answer from inside before I pushed off. I had reappraised Mike's words, sans sound, sans fury, and while I did not approve of their sentiment or significance, I had opted for civility anyhow.

So down, under, and away. I followed a decent cast about two hundred-ninety meters out. The snaking cables burned black to my left and I paced their undulations from the yellowgreen down into the darkness. Soundless lay the wet night, and I bent my way through it like a cockeyed comet, bright tail before.

I caught the line, slick and smooth, and began baiting. An icy world swept by me then, ankles to head. It was a draft, as if someone had opened a big door beneath me. I wasn't drifting downwards that fast either.

Which meant that something might be moving up, something big enough to displace a lot of water. I still didn't think it was Ikky. A freak current of some sort, but not Ikky. Ha!

I had finished attaching the leads and pulled the first plug when a big, rugged, black island grew beneath me . . .

I flicked the beam downwards. His mouth was opened.

I was rabbit.

Waves of the death-fear passed downwards. My stomach imploded. I grew dizzy.

Only one thing, and one thing only. Left to do. I managed it, finally. I pulled the rest of the plugs.

I could count the scaley articulations ridging his eyes by then.

The squiggler grew, pinked into phosphorence . . . squiggled!

Then my lamp. I had to kill it, leaving just the bait before him.

One glance back as I jammed the jatoes to life.

He was so near that the squiggler reflected on his teeth, in his eyes. Four meters, and I kissed his lambent jowls with two jets of backwash as I soared. Then I didn't know whether he was following or had halted. I began to black out as I waited to be eaten.

The jatoes died and I kicked weakly.

Too fast, I felt a cramp coming on. One flick of the beam, cried rabbit. One second, to know . . .

Or end things up, I answered. No, rabbit, we don't dart before hunters. Stay dark.

Green water, finally, to yellow-

green, then top.

Doubling, I beat off toward Tensquare. The waves from the explosion behind pushed me on ahead. The world closed in, and a screamed, "He's alive!" in the distance.

A giant shadow and a shock wave. The line was alive, too.

—Good-bye Dabis, Violet Eyes, Ikky. I go to the Happy Fishing Grounds. Maybe I did something wrong . . .

Somewhere Hand was clenched. What's bait?

A few million years. I remember starting out as a one-celled organism and painfully becoming an amphibian, then an air-breather. From somewhere high in the treetops I heard a voice.

"He's coming around."

I evolved back into homo sapience, then a step further into a hangover.

"Don't try to get up yet."

"Have we got him?" I slurred.

"Still fighting, but he's hooked. We thought he took you for an appetizer."

"So did I."

"Breathe some of this and shut up."

A funnel over my face. Good. Lift your cups and drink . . .

"He was awfully deep. Below scope range. We didn't catch him till he started up. Too late, then."

I began to yawn.

"We'll get you inside now."

I managed to uncase my ankle knife.

"Try it and you'll be minus a thumb."

"You need rest."

"Then bring me a couple more blankets. I'm staying."

I fell back and closed my eyes.

Someone was shaking me. Gloom and cold. Spotlights bled yellow on the deck. I was in a jury-rigged bunk, bulked against the center blister. Swaddled in wool, I still shivered.

"It's been eleven hours. You're not going to see anything now."

I tasted blood.

"Drink this."

Water. I had a remark but I couldn't mouth it.

"Don't ask how I feel," I croaked.
"I know that comes next, but don't ask me. Okay?"

"Okay. Want to go below now?"
"No. Just get me my jacket."

"No. Just get me my jacket."
"Right here."

"What's he doing?"

"Nothing. He's deep, he's doped

but he's staying down."

"How long since last time he showed?"

"Two hours, about."
"Jean?"

"She won't let anyone in the Slider. Listen, Mike says come on in. He's right behind you in the blister."

I sat up and turned. Mike was watching. He gestured; I gestured back.

I swung my feet over the edge and took a couple deep breaths. Pains in my stomach. I got to my feet and made it into the blister.

"Howza gut?" queried Mike. I checked the scope. No Ikky.

Too deep.

"You buying?"
"Yeah, coffee."

"Not coffee."

"You're ill. Also, coffee is all that's allowed in here."

"Coffee is a brownish liquid that burns your stomach. You have some in the bottom drawer."

"No cups. You'll have to use a glass."

"Tough."

He poured.

"You do that well. Been practicing for that job?"

"What job?"

"The one I offered you—"

A blot on the scope!

"Rising, ma'am! Rising!" he

yelled into the box
"Thanks, Mike. I've got it in
here," she crackled.

"Jean!"

"Shut up! She's busy!"

"Was that Carl?"

"Yeah," I called. "Talk later," and I cut it.

Why did I do that?

"Why did you do that?"
I didn't know.

"I don't know."

Damned echoes! I got up and walked outside.

Nothing. Nothing.

Something?

Tensquare actually rocked! He must have turned when he saw the hull and started downward again. White water to my left, and boiling. An endless spaghetti of cable roared hotly into the belly of the deep.

I stood awhile, then turned and went back inside.

Two hours sick. Four, and better.

"The dope's getting to him."

"Yeah."

"What about Miss Luharich?"

"What about her?"

"She must be half dead."

"Probably."

"What are you going to do about it?"

"She signed the contract for this. She knew what might happen. It did."

"I think you could land him."

"So do I."

"So does she."

"Then let her ask me."

Ikky was drafting lethargically, at thirty fathoms.

I took another walk and happened to pass behind the Slider. She wasn't looking my way.

"Carl, some in here!"

Eyes of Picasso, that's what, and

a conspiracy to make me Slide . . .

"Is that an order?"

"Yes—No! Please."

I dashed inside and monitored. He was rising.

"Push or pull?"

I slammed the "wind" and he came like a kitten.

"Make up your own mind now."

He balked at ten fathoms.

"Play him?"
"No!"

She wound him upwards—five

fathoms, four . . . She hit the extensors at two,

and they caught him. Then the graffles.

Cries without and a heat lightning of flashbulbs.

The crew saw Ikky.

He began to struggle. She kept the cables tight, raised the graffles . . .

Up.

Another two feet and the graffles began pushing.

Screams and fast footfalls.

Giant beanstalk in the wind, his neck, waving. The green hills of his shoulders grew.

"He's big, Carl!" she cried.

And he grew, and grew, and grew uneasy . . .

"Now!"

He looked down.

He looked down, as the god of our most ancient ancestors might have looked down. Fear, shame, and mocking laughter rang in my head. Her head, too?

"Now!"

She looked up at the nascent earthquake.

"I can't!"

It was going to be so damnably simple this time, now the rabbit had died. I reached out.

I stopped.

"Push it yourself."

"I can't. You do it. Land him, Carl!"

"No. If I do, you'll wonder for the rest of your life whether you could have. You'll throw away your soul finding out. I know you will, because we're alike, and I did it that way. Find out now!"

She stared.

I gripped her shoulders.

"Could be that's me out there," I offered. "I am a green sea serpent, a hateful, monstrous beast, and out to destroy you. I am answerable to no one. Push the Inject."

Her hand moved to the button, jerked back.

"Now!"

She pushed it.

I lowered her still form to the floor and finished things up with Ikky.

It was a good seven hours before I awakened to the steady, seachewing grind of Tensquare's blades.

"You're sick," commented Mike.

"How's Jean?"
"The same."

"Wheres the beast?"

"Here."

"Good." I rolled over.
". . . Didn't get away this time."

So that's the way it was. No one is born a baitman, I don't think, but the rings of Saturn sing epithalamium the sea-beast's dower.

CHANGING YOUR ADDRESS?

The Magazine of FANTASY and SCIENCE FICTION will follow you anywhere providing you let us know six weeks in advance. Please be sure to give us your old address as well as the new one, and add the ZIP number. (If convenient, send the address label from the wrapper of the next copy of F&SF you receive.)

Subscription Service MERCURY PUBLICATIONS 347 East 53 Street New York, N. Y. 10022 J. H. Brennan is the editor of a weekly newspaper in Ulster, Northern Ireland. He writes: "have enjoyed reading science fiction and fantasy for years. Took seriously to writing fiction about six months ago, with FINAL APPEAL one of the first attempts at SF." And an extraordinarily successful attempt it is. The Law itself may be comparatively certain and easily ascertained, but what about the judicious application of the Law? Juries and judges are certainly fallible. Is there a better way? Mr. Brennan's story here concerns a murder trial of the future, in which "human error" has been eliminated . . . or has it? Wrote Melville: "Who's to doom, when the judge himself is dragged to the bar?"

FINAL APPEAL

by J. H. Brennan

"PERMISSION TO APPEAL, YOUR Honour?"

There was a second's pause and just the slightest hint of humming in the silence of the courtroom before the Judge said: "Permission granted."

That was the special circuit, Kellett thought. Permission to appeal was always granted, an imbecile safeguard where no safeguard was needed.

Kellett rose and bowed, murmuring, "As Your Honour pleases." Like his bow, the words were a formality of practice seldom observed in these days. But Kellett, in many ways, was a live anachronism. He liked these little touches of a less frenzied era.

His was the last case of the day and as he turned to leave, the Clerk of Court, a dapper little man with cheerful, almost elfin features, leaned across and quietly switched off the Judge.

In Chambers, Kellett disrobed slowly, lost in thought.

He was an old man, tall and thin, stooping, frail. He carried with him an odd air of indecision which, however, vanished when he spoke. The cold, harsh tones used words precisely and betrayed a razor mind. At the peak of his career, Kellett had been close to invincible; even today he was one of the most formidable men in his profession.

Carefully he folded up his gown, then, placing the limp white wig on top, he stored them both away on the top shelf of his locker. His thoughts depressed him. Half the trouble was that he disliked his client: but then who would not? little Henry Woods Fat sweated all the time and screamed for Justice when he wanted Mercy would insist that an appeal was carried through. He refused to understand that appeals, like courtesy to the Judge, were mere formalities.

Woods had killed his wife. Sane men do not kill. Ergo Woods was not sane.

The Appeals Court Judge would reason the same way. The Supreme Court Judge would reason the same way—if Woods insisted on this final futility. All robots reasoned the same way. The appeals procedure remained to guard against mechanical instability, or the possibility of a faulty programming: nothing more.

Kellett sighed. He could remember days, but only just, when he had enjoyed his work. That was before the government abandoned a legal system riddled with the anomalies which human error could produce and replaced it with a cold perfection in the shape of Judges which could never be swayed by an emotion, or bluffed on a point of law.

Kellett hated them with irrational intensity.

As he left Chambers, walking with slow dignity along the corridor towards the ancient stone steps leading to the cells, Kellett thought with extreme distaste of the coming interview. The case, he now saw, had been quite hopeless from the start. Briefly he wondered how he had ever come to take it on.

There might have been no other soul within the building as he walked down the long stone steps, but at the bottom, near the entrance to the cells, a single warder in familiar blue snapped upright from a daydream, then relaxed as recognition dawned.

Kellett nodded briefly, waiting without sign of emotion as the man unlocked the massive door to Cell Block One. Together they stepped through and the door swung shut behind them. The corridor was windowless, lit by hidden, artificial light.

Woods' cell was a little more than half way along. The warder selected another key, pressed it briefly on the lock, then stepped back as the door opened to allow Kellett to pass inside.

The cell itself was tiny, little changed for generations. Its only furniture was a table and a wooden bench.

In prison—before prisons were abolished—such a cell would never have been tolerated. But here it was a temporary confinement where the prisoner spent perhaps an hour before and after trial. His

next move was to Treatment Centre . . . or to freedom.

And in Woods' case he would move on to neither. His lot would be a luxury detention centre until his appeal was heard.

Woods jumped up eagerly from the bench as Kellett entered. He was that nervous, balding type of man who might have been a bank clerk or a civil servant in the days before bank clerks and civil servants had been replaced by the ubiquitous robots. As it was Woods was a member of the vast non-employed, the men and women who never worked and never would. drawing from an automised State a generous allowance which permitted them to live in such luxurious boredom that, on occasion, they became unhinged.

This was, presumably, what had happened to Henry Woods. For years he must have had all that his heart desired—a sevenstory home with robot servants, three private flyers, two swimming pools with built-in weather control devices, a personalised Feelerama and a thousand more beside.

Yet Henry Woods was prematurely bald and sweated all the time and could not always meet your eyes. One bright and sunny morning he woke up before his wife and strangled her.

He came over, standing so close that Kellett noticed with distaste the dilation of his pupils. Woods had been taking drugs; probably the mescal derivative which had begun to oust alcohol as the world's barrier against reality.

"Mr. Kellett, I thought you'd never get here! This thing has been driving me crazy! It shouldn't be allowed, leaving a man buried down here after his trial with nothing to do but think!" He reached up and actually gripped Kellett's lapels. "What are my chances in the appeal, Mr. Kellett? Pretty good, huh? I want the truth, remember!"

Kellett fought down a wave of revulsion. Even in his present extremity, Woods' behaviour was in abominable taste. Eventually he said coldly: "Your chances of acquittal, Mr. Woods, are negligible. The appeal is a mere formality—at most a delaying tactic. The result is a foregone conclusion. Appeal Judge will uphold the decision of the Court today."

Woods' eyes grew wide; there was perspiration on his upper lip to match the beads upon his forehead. "You can't mean that, Mr. Kellett! There must be something you can do! Please, Mr. Kellett, there must be some way round these machines. You've studied robotics. For God's sake—"

"Control yourself!" Kellett snapped, taking a backwards step to rid himself of Woods' grip. "You murdered your wife. You can not expect your circumstances to remain unchanged after that!" He paused briefly, staring down at the other man. "Frankly I cannot see why you are making such a fuss. When I was first called to the Bar the sentence might have been death."

Woods moved over to the wooden bench and sat down slowly. "It might as well be! I've seen what the operation does to a man. The old self is gone. But what do you care? What do any of you care? It's me they're going to do it to!"

Kellett sighed inwardly. It was at times like this he was most tempted to take to drugs himself. They would, he felt, provide a buffer between the Woods's of humanity and himself—a buffer which was often sorely needed.

"Mr. Woods," he murmured patiently, "you may as well get used to the idea now as later. You are going to undergo leucotomy because you murdered your wife and are considered legally insane. That was the sentence of the Court today and—"

Woods jumped up and caught his arm. "But we've appealed, Mr. Kellett! I'm relying on you!"

"The Appeals Court sits at the end of this week. Leucotomy will be postponed until the end of this week, that is all," said Kellett brutally.

"But Mr. Kellett—" Woods' voice had risen to an uncomfortable pitch. "—you might convince the Appeals Judge that I shouldn't have it. It might take a different viewpoint from the Judge in Court

today! Mightn't it?" he added unsurely.

"No." Kellett said shortly. "Please understand, Mr. Wood, that we are dealing with robots and programming. All these machines are programmed in exactly the same way; they have to be—the Law is standard. Their brains are constructed on the same principles and they all reach conclusions by a process of relentless logic. Given the same set of premises—or evidence, if you like—they will all reach the same conclusion. We have no fresh evidence to introduce: the conclusion is inescapable."

"If we lose at the Appeals Court, we can take the case to the Supreme Court, can't we?"

"That, Mr. Woods, is your privilege as a citizen."

Suddenly Kellett felt very tired. Woods, he knew, would never understand the futility of his position. He would drag the case through Appeals Court to Supreme Court and then complain because there was no higher Court in which to stage another hearing. Despite his efforts the result would never for an instant be in doubt.

When all was said and done, Woods would undergo leucotomy.

Unlike the lower Court, which had been modelled on traditional lines, the Appeals Court was held in a purely functional room. Apart from Kellett and his client, there were only two people present, the Clerk of Court and a bored warder, armed with gasgun lounging near the door.

Comfortable armchairs were provided for lawyer and client, while the large black box which was the Judge was actually built into the wall facing them. The Clerk, declining the official, straight-backed chair provided for him, hovered fussily around the desk before the Judge, carefully sorting the taped transcripts of the lower Court proceedings.

"Shall we begin?" he asked eventually.

Kellett nodded and the clerk began to feed the tapes into a slot beneath the Judge's speaking panel. In ninety seconds the robot had evaluated the evidence and considered the decision of its mechanical colleague. There was a soft crackling behind the speaking panel before the Judge said: "Any further evidence, Mr. Kellett?"

Kellett rose. "There is no further evidence, Your Honour."

The Judge assimilated this negative information. Then: "The verdict of the lower Court is upheld."

And that was all. The entire hearing had taken slightly more than three minutes. Kellett murmured wearily: "Permission to appeal, Your Honour?"

After a second the Judge said: "Permission granted."

"You didn't try!" Woods ac-

cused. "You hardly spoke a word the whole time. How did you expect to win if you didn't say a thing!"

"I did not expect to win, Mr. Woods." Kellett wished heartily he had never taken on the case. Even his inbred dislike of robot Judges was nothing to his growing dislike of his client. The man was not only a murderer, he was an imbecile!

Sighing, he made one more attempt. "Mr. Woods, why not accept the fact that you have been convicted? The Appeal was a formality. The Judge considers evidence—nothing more. I could have made an hour-long plea for leniency to keep you happy, but it would have been a waste of time. We are not dealing with humans who can be swayed by playing on their emotions. We are dealing with robots!"

"There's still the Supreme Court," Woods said.

The Supreme Court was very similar to the Appeals Court in structure, but there was one major difference in procedure. While the Appeals Judge evaluated tapes of the original trial in silence at top speed, the Judge of the Supreme Court played the tapes aloud during evaluation. During this playback, Kellett was at liberty to add his comments on any point which might be held in favor of his client.

For Kellett, from beginning to

end, it was an exercise in futility.

Woods was sitting nervously on the edge of his chair, listening to the evidence pouring like a radio from the Judge's speaking panel. The Clerk, a cheerful young man who followed the current fad for multi-coloured contact lenses, had nodded off to sleep and seemed in danger of toppling from his chair beneath the judge.

Kellett closed his eyes briefly and sank back in the armchair, listening to the voice of Woods' next door neighbour.

"... the whole truth, and nothing but the truth. Mrs. Ann Leslie, Your Honour."

Kellett sat bolt upright. Out of nowhere, without warning, his subconscious had presented him with a loophole in the Law. As the woman's voice droned on, he thought it over carefully and with growing excitement realised it might work. He glanced across at Woods, but failed to catch his eye.

In the hours that followed, Kellett waived his right to comment on the evidence. Woods at first seemed bewildered, then angry and finally dispirited. Kellett allowed him to suffer.

At the end of an eternity, the evaluation of evidence was over and the Supreme Court Judge repeated the question of its Appeals Court counterpart.

Kellett rose slowly, said, "No further evidence to add, Your Honour," then sat down again abruptly. Woods seemed on the point of hysterics. The Judge, as Kellett knew it would, hesitated for a second before stating: "Verdict upheld."

His stomach knotting, Kellett rose again. "Permission to appeal, Your Honour?"

The Clerk glanced up in surprise and seemed about to speak. Even the warder looked mildly interested: it was not often a lawyer made a fool of himself.

The Judge, however, digested the request as carefully as it had digested the evidence earlier in the hearing. Eventually it said: "Permission refused."

Kellett, still on his feet, asked: "On what grounds, Your Honour?"

He could have repeated the reply verbatim. It followed the established pattern perfectly. "Since there exists no Court of higher authority than the Supreme Court, an appeal cannot be put into practice following a Supreme Court decision. The question itself is meaningless. Appeal machinery cannot be set in operation; it follows that permission to appeal must be refused."

It depended on the robot's programming, of course, but Kellett took the chance. As Supreme Court Judge, this robot would normally have a more extensive programming than the average Judge. He prayed that programming included a really wide look into legal history.-

"There is one Court higher than the Supreme Court," he said. "I intend to appeal to God."

"Mr. Kellett!" exclaimed the Clerk of Court. The warder snig-

gered.

"I am not in possession of sufficient data to understand your submission, Mr. Kellett" said the Judge.

"Your Honour is aware of the concept of God?" asked Kellett. He was sweating slightly. The damn thing would have to have some idea

of God.
"In its broader outlines."

"Your Horizan is also aware that God is recognised by the Courts as Supreme?" This was less solid ground and he prepared for an objection.

It came. "The Supreme Court is held to be Supreme in matters of Law, Mr. Kellett."

"If a witness was called before the Supreme Court—even the Supreme Court-he would be required to swear the Oath before the Almighty God, Your Honour. This would suggest that the State places God in a higher position than the Court itself. Were this not so, the Oath would be sworn in the name of the Supreme Court, or the Supreme Court Judge." He had grown strikingly aware of the nightmare elements of his argument. Before a human judge he would have been held in contempt long ago, but the Judges were different. They were unable to differentiate between valid and nonsensical argument so long as it remained logical and did not contradict their programming.

He took a deep breath. "I propose to appeal this case to God, as representing the highest Judge recognised by the State."

He paused.

With the faintest hiss of static, the Judge said: "If I allow your point, Mr. Kellett, by what means would you make the appeal?"

This was the one he had been dreading. "Since no man may meet God until after death," said Kellett, fighting a maniac desire to giggle, "I would ask for a stay of execution of the sentence until my client has lived out his natural life span. After death his appeal can be heard, and if confirmed, sentence may then be carried out."

This time he held his breath. Even a robot cannot be expected to swallow everything.

"Can you quote a precedent for a decision of this type?" the judge asked. Already it would be methodically searching its vast memory banks for just such a decision. Now everything depended on its programming.

Kellett said: "In the Middle Ages, trial by Divine Intervention was not unknown."

A silence enveloped the room. For a full minute it hung, thick and heavy, then the Judge said: "That is true, Mr. Kellett, but in those trials the defendant's guilt was determined by some form of casting lots. God interfered in the case of an innocent party, to ensure the dice, or other chance machinery, produced a favourable result. There was no question of awaiting the natural death of the defendant before trial."

Quite literally thinking on his feet, Kellett replied without hesitation. "In that case, Your Honour, I would change my request to that of a re-trial by casting lots."

He glanced across as Woods, who seemed paralysed by what was going on.

There was a nerve-wracking pause of almost a minute before the Judge said: "I must acceed to your request, Mr. Kellett. A re-trial is ordered on the grounds you suggest."

It made the videocasts, of course. Newsmen, even in this day and age, still hunted for the eccentric and unusual.

Kellett took no part in the actual trial, but followed it with in-

terest on his own trivideo. In a way it was unfortunate that the business did not last a little longer, but the little that there was seemed most impressive.

Dice were used, in keeping with tradition, and a touch of irony was added by the fact that Woods was pitted against a robot thrower.

Watching, Kellett was delightedly aware that even as the trial was taking place, politicians were working feverishly to plug the loophole in the Law. But their efforts were of no importance: Woods would get his chance and the Judges had been outwitted once again. Against an agile human mind, they were still very, very fallible.

And the fact that Woods lost the verdict of the dice and was taken to the Treatment Centre for immediate leucotomy did nothing to mar Kellett's pleasant sense of victory.

Had it been otherwise, in fact, his belief in the Almighty might have been profoundly shaken.



LOW-LEVEL WEATHER

by Theodore L. Thomas

AFTER ALL THESE YEARS, THE scientists who study weather have finally got around to the most important region of all. This is the region that lies the first few hundred feet above the ground. Here is where people live, people and all other living things. The branch of meteorology that deals with this low-level region is called micrometeorology.

Measurements have shown that conditions existing in the low-level region are quite different from those in higher layers. For one thing, temperature changes are unusually large. From ground surface to a foot or two in the air, it is common to find a temperature range greater than 15 degrees F. A few hours of time may often produce a temperature change of 50 degrees or more. This occurs when the sun sets, or when it rises. On hillsides, or near bodies of water, these temperature changes produce airflows that have much to do with the climate of the region. The airflow is related to air pollution.

The micrometeorologists can set up controlled experiments in wind tunnels and watch what happens. They can put a model factory in the tunnel and follow the dispersion of the smoke. By noting how one fluid flows in another, they learn how smogs form. In fact, almost the entire field of fluid dynamics comes in handy. Much work is being done to analyze the effects of temperature inversions in which a layer of colder air overlies warmer air.

But the work done so far has not involved the addition of materials to the low-level air to cause desirable results. Deodorants, nutrients, medications could be added in a manner now reserved for war gases. Particle sizes and densities could be adjusted so that liquid droplets or a powder hang at a predetermined elevation. If an area such as a valley were threatened by an oncoming mass of cold air, polymerizable fogs of proper density could be discharged to form an overhead layer that would polymerize to produce a solid film. The area would be protected by a canopy. Strong films might produce the greenhouse effect and actually warm the entire area. Perhaps whole cities could be tented in this manner, and man would finally be in a position to produce his own weather.

Our newspaper recently carried a report about the "tired child syndrome" (symptoms: anxiety, chronic fatigue, nightmares, abdominal pains) which two pediatricians ascribed to "hunching for hours in front of the TV set." Their report went on to say "the content of nightmares, phobias and compulsions were related directly to the television programs . . ." Carried to the ultimate, the consequences may not be pleasant to contemplate, but we maintain that there are many beneficial by-products. For instance, we think it safe to say that never has there been a generation of children so apprised of the need to use a deodorant. Jack Sharkey has evidently also considered this general matter, and the result is below, for you to read and enjoy.

ESSENTIALS ONLY

by Jack Sharkey

I'm sorry I ever told Artie Lindstrom about that hole to Terra Two. I should've had more sense. I mean, Artie's a great guy, in many ways. He puts up the money for the beers as often as he accepts a drink on me, he's neatly groomed, reads and follows all the ads for popularity through hygiene, and he's helped me get rich as all getout, through his inventions, plans and schemes.

The trouble is none of Artie's ideas work out right. They end up doing something spectacular, all right; it's just that the spectacle is never quite the one he had in mind at the outset. Take his Mouse-

No-More. A simple gadget. Two disintegrator-heads set in circuit at the cheese-platform. The mouse sticks his head in, the beam leaps across the poles, and the housewife is saved the trouble of disposing of dead rodents. You can't blame Artie for the fact that the first thousand manufactured had the heads mounted backward, can you? Not only did the mouse's activate a beam that presence carved a mouse-sized hole clear around the globe and back to the other side of the trap; the housewife still had a live mouse to contend with, and the cheese was eaten, anyhow. Did Artie suffer? By no means. The moon stations bought his defective traps to bore cableholes around our satellite so the outlying stations could get TV shows, and Artie was a hundred thousand bucks richer.

Or take his missile-shield. At the first warning of attack, a network of interlocking rays would safely keep out enemy rockets. Trouble was, the shield also kept out sunlight, fresh air, inspecting officials, and the all-clear signals, and put everyone inside the hemisphere into a state of perfect suspended animation. The first time it was tested, the country had to do without Chicago for three months, until the generator ran down. Did Artie get chewed out? Well, yes, for about five minutes, until someone realized that such a system was perfect for starships. Crew and passengers and ship were guaranteed a safe, non-consuming trip to anywhere in the universe, with the ship itself likewise protected from meteorites, cosmic rays, and all the nasty little disadvantages of interstellar flight. This time Artie cleared half a million.

So, despite immediate annoyances, his life has been fantastically serendipitous. However, I still think I should've kept my mouth shut about that hole to Terra Two; knowing Artie, I mean.

But I didn't. And here's what happened:

"But how can you be sure it's another dimension, Burt?" Artie asked me, scowling into his mug of ale. "It might be simple teleportation to another part of Earth, or to another planet entirely."

I shrugged and spread my hands. "What's wrong with either of those? Instant transmission to other places is a pretty good setup in itself."

"If you knew how it worked," Artie pointed out shrewdly. "You can't patent a hole in your cellar wall. You sure your star-readings were accurate?" he asked.

"On the nose," I said. "All the familiar configurations: Orion, the Dipper, Polaris, everything. I even took two photographs and overlaid the negatives. Everything lined up. It's just got to be another Earth, in another dimension, It's gorgeous, Artie. I went exploring, a few hundred vards in all directions. Beautiful pre-blight chestnut trees in a grove where my garage ought to be, a crystal-blue river running down what should be Highway 17, a mile-wide field of flowers where I expected to see the fish cannery. I love the place, Artie. I could move there right this minute, without a qualm."

Something glinted in Artie's eyes, then. Something I'd never seen before in this moolah-mad friend of mine. A kind of soft, mellow glint. He looked almost human, suddenly.

"Pick up that newspaper, Burt,"

he said, pointing beside his refrigerator. I did as indicated, and held it, waiting. "What do you read in it?"

"Well," I said, "there's nothing really new in the news . . . Russia warns U.S., robbers heist bank, Dean of girl's college arrested as head of vice ring, two five-year-old boys blow up city hall. Just run-of-the-mill stuff."

Artie nodded sagely. "Exactly. Bit by bit, person by person, place by place—The whole world going to hell on greased rollerskates, right?"

"With a jet assist," I nodded.

"But it doesn't have to go that way. Not any more."

"Artie—!" I said, a little dazed by his innuendo. "You think we should start our own world?"

"Why not! Think of it: No more taxes, no more rent, no more midnight muggings—"

I thought of it, and added a few negatives of my own. "No more movies, no more fireworks, no more best sellers . . ."

"Movies," Artie said decisively, "are getting steadily worse, it is against the law to possess firecrackers, and best sellers are slanted toward the movies anyways."

"Okay," I said, convinced. "We start our own world." A thought struck me, and I spoke it aloud, slightly selfconscious. "We'll need women— Well, you know."

"I know two who'd love to go," said Artie. "Janice LePage and her girl friend Bessie Bliss. They live behind the gas works and never get to go anywhere."

"Now, Artie—" I said warningly, "The last blind date you set up for me, my girl kept quoting Swinburne all night and eating chocolate creams five at a time."

"You'll love Bessie," said Artie, placing a fond hand on my shoulder. "A million laughs. Great personality."

"Can't I pick my own girl?" I pleaded.

"What if she doesn't hit it off with Janice?" he warned.

"What if Bessie doesn't hit it off with me?" I complained. "You can't start a dynasty with a fist-fight."

"So which girl?" he sighed. "All you ever seem to meet are giggly coeds and jumpy librarians."

"I know," I said, "but I did meet somebody different the other night. Her name is Topaz Jenson. She used to do a strip act, but when her bookings got cancelled in Rangoon, she got interested in Buddhism, and now she's gentled down somewhat. Is Janice interested in Nirvana?"

"I doubt it," Artie mused. "Are you?"

"I am, the way Topaz approaches it. She figures that the more help she gets, the better, so she always keeps her midriff bare so everybody can contemplate her navel. It's a pleasure to help her out."

"She—" Artie seemed hesitant,

then plunged. "She doesn't happen to be pushy about it? I mean, does she try and win converts all the time?"

"Do you mean if she meets Janice. Ianice might start going around with a bare midriff?" I asked. Artie nodded. I nodded right back. Artie smiled.

"I'll put her name on the list." "What list?" I said, frowning

dubiously.

"We've got to approach this thing methodically. Boy Scout Handbook, so we can rough it in leisure, a case of gin and a bottle of vermouth, till we lose the taste for the stuff, suntan lotion, since we'll be outdoors a lot. Five hundred-carton cases of filter-tip cigarettes, till our tobacco fields are ready to harvest . . . And stuff like that."

"Oh," I said, seeing the wisdom of his plan. "Okay. Fair enough. A girl apiece, handbook, gin and vermouth, lotion, cigarettes. I'll go phone Topaz."

"And tell her to bring all the ice she can carry," said Artie. "I hate warm martinis."

"I love picnics," said Topaz, resplendent in puce shorts and green halter, her ink-blue eyes twinkling under their blueblack lashes. She bore a wicker hamper full of fried chicken and potato salad in one hand, and a Tibetan prayerwheel in the other. "Where're we going?"

"To a secret spot that only Burt knows," said Artie, between torrid glancés at Janice LePage, who had bared her midriff without even meeting Topaz, thus saving us an hour of fanatic exhortations. I'd lied. and told Topaz that Janice was already of her persuasion. In fact. Artie and I were up to our ears in whoppers already, having neglected to inform either girl of the extent of the picnic grounds, nor of our dynastic ambitions. That could come later, after we'd cemented the hole in my cellar wall.

When our foursome got abreast of my front porch, the girls kind of held back on the front walk. "What are we going in here for?" asked Janice, with a little less bounce than her voice had been employing on the stroll over.

"I think picnics should be out-

doorsier," abetted Topaz.

"We are going outdoors," Artie

said smoothly.

"I don't want to picnic in a back vard," said Janice, planting her feet solidly and pouting. "Especially this near the fish cannery."

"Just come see the place," I begged. "If you don't think it's the most romantic picnic spot you ever saw, we'll take you right home. Honest."

"Well-" said Topaz, uncertainly, looking to Janice for some kind of support, one way or the other.

"If we don't like it, you'll really take us home?" said Janice, running a nervous hand through her lemon-blonde hair. "Right away, no delay? No pleading or . . .?"

"Honest!" Artie and I chorussed, raising our hands in what turned out to be the scout's-oath gesture, no doubt influenced by the handbook we'd conned the night before for info on fire-lighting, water-finding, and camp songs.

"Okay," said Topaz. "We'll go

look."

Trying to be calm about it, we led the way into my house and down into the cellar. The hole shimmered invitingly. Beyond it, green fields of grass lay like sunsoaked emerald, and dark cool shadows lingered invitingly beneath the arching trees.

"What are those big boxes out

there?" asked Topaz.

"Cigarettes," said Artie. "We didn't want to run out of cigarettes." He nibbled a hangnail, lowered his eyes.

"I don't see the cannery," To-

paz added, puzzled.

"You—You can't see it from here," said Artie. "Go outside and look. Go on. It's real nice. Real nice. Go on. Outside. Go"

Smiling a bit apprehensively at one another, the girls gave a what-can-possibly-happen? shrug in unison and stepped through the gap in the cellar wall. Artie and I followed like lightning.

"See?" said Artie, taking Janice's elbow and guiding her across the verdant dale toward the twinkling serpentine of the river. "A lovely spot for a picnic."

"It—It is nice..." Topaz murmured to me, as I followed his example and vector. "But how come I can't see your house when I look back? Nothing but a black hole in the air."

"A—A trick of the light," I said. "I don't know why you can't see it. Don't ask me. Just can't." I ended with a laugh that became a nervous giggle that became a hiccough and stopped.

Both girls looked at one another, frowned, then pulled away from us and stood defiantly shoulder to shoulder. "I think—" said Janice, fighting a quaver, "you two men owe us some sort of explanation."

"Yes," said Topaz. "This isn't your back yard, Burt. It isn't a back yard at all. It's a whole planet. I feel it. I feel it in my navel!"

Artie looked at me, we exchanged a despairing look, and then we blurted out the whole frenetic story, each continuing when the other ran out of air. When it was told, we stood with downcast eyes, awaiting their righteous indignation and insulted wrath. There was a lull, then Janice spoke.

"It's a wonderful idea!" she said, and Topaz was nodding happily when we looked up. "Except for one thing." "What thing? What? We'll fix it. Right away!" said Artie, without checking with me, although I was behind him to the hilt.

"Marriage," said Janice. "We have to get married, first. Otherwise, your idea's fine."

"Okay," said Artie. "But please
—Not a word to the preacher
about this place."

"You surely don't expect us to leave to get married?" said Janice, amazed. "You have to bring the preacher here."

"A Buddhist preacher," appended Topaz.

"But why here?" I said, shocked.
"He'll surely tell someone when he goes back—"

"Back?" gasped Topaz. "But he mustn't go back. If he goes back, we can't stay here."

"For pete's sake, why not?!" exploded Artie.

"Who'll marry our children?" said Janice, reasonably. "Do you want a rash of illegitimate grand-children?"

"And we'll need at least two other couples," said Topaz, with irrefutable logic, "unless you want our grandchildren intermarrying into their own family."

"Okay, okay, anything!" said Artie. "Don't go away! We'll get the preacher and two other couples. Then will you be satisfied?"

"Perfectly," sighed Janice, and Topaz bobbed her head in amiable agreement. "A preacher and two other couples will do nicely." "But they'll have to bring their own smokes!" I growled, following Artie toward the black hole over the grassy green ground of the field.

We picked up the Joneses waiting at a bus stop, and the Kerricks coming out of a delicatessen. Mavis and Walter Jones were about our own ages, but the Kerricks, Idabel and Henry, were in their late forties. "We probably won't have any children," they said, when we'd made our offer, "but we don't mind being baby-sitters for the rest."

We decided this wasn't a bad idea, and sent Mavis and Walter to my place to tell the girls things were developing splendidly, and the Kerricks back into the delicatessen for an extra pound of salami, then Artie, myself and the Kerricks set out to hunt up a Buddhist preacher. (Janice didn't care what his religion was, so long as he was a legal marryer.)

We found Soong Lai How

We found Soong Lai How picketing a cummerbund factory, and soon enlisted him to the cause. It was getting near suppertime, so we had to talk him into taking a cab with us (he thought walking was good for the soul, but we were ten miles from town already), and heading back to my place.

Janice and Topaz and the Joneses had finished the chicken by the time we got back, but there was plenty of potato salad to go with the salami, so we all made a

good meal, and then settled back to the business at hand: getting wed.

"I regret," said Soong Lai How, "that such a marriage cannot be performed at this time. We must have a bridal barge."

"What's a bridal barge?" I said, eagerly. "We'll rent one."

"I seriously doubt," continued Soong, "that such an object can be made to broach you narrow portal. It must be built, by the bridegrooms themselves, anyhow. Then, at the moment of sunset, hand in hand with your intended, you two men, your blushing brides, and myself, will be borne down von swift blue stream, as man is borne down the stream of life, and I will sprinkle you with the waters thereof, and—But it takes too long to tell. It's quicker to just do it. Build the barge, and I'll marry you the ensuing sunset."

Artie lost the toss, so while he —under the supervision of Soong Lai How—began to hew down a magnificent bronze-barked chestnut, I betook myself to the rest of the group, who were making vast inroads into Topaz's icebucket, along with our gin and vermouth.

"I was thinking," said Mavis Jones, between mammoth pulls at a pint-size stein of crystal liquid from which came the red alien stare of two green olive-pimentos, "it would be awful if one of us came down with appendicitis. Your boy scout handbook doesn't

cover that. Couldn't we have a doctor?"

Seeing the brief flash of dismay on my face, Topaz softened the blow with, "We could get a female Buddhist doctor, Burt. That way, Soong wouldn't be lonely here, and we'd kill two birds with one stone."

Before I could reply, Iidabel Kerrick snapped her fingers and elbowed Henry. "Didn't I tell you there was something odd about this place, dear? There are no birds. Or even insects. Probably no fish in the rivers, either."

I looked around, a bit shaken. She was quite correct. On Terra Two, we were truly alone. That meant stocking the place with game, learning the art of husbandry, taking along a balance of predators so we wouldn't be up to our tailbones in the more timid species. "Artie!" I called. "Artie, come over here, quick!"

He was only too glad to drop the hatchet and run to my side. "What's up now?" he demanded, wiping drizzles of salt sweat from his forehead. I told him, and watched the sag-lines of momentary gloom set themselves into the harder configurations of grim determination. "Okay. We'll get some game for the place. Pigeons, horses, tarantulas, piranhas, puffins, anacondas, grebes, and so forth. And while we're getting the things—" he said with taut humor, clapping a hand on Henry's shoul-

der and pointing toward the fallen hatchet, "—you can build the bridal barge!"

While the Joneses were thinking it over, Artie and I raced for the black hole and dashed into the sanctuary of my cellar. He turned his head and looked back at the hole. "Could we get animals through there, Burt? I mean like cows and things? How long did it take you to poke that gap?"

"I didn't poke it," I said. "It just appeared. I hooked up my new gas heater yesterday morning, so I had to move the wires leading to my electric stove, upstairs in the kitchen. By the fuse box, I mixed the plugs by accident, and got the TV running in parallel with the air-conditioner and stove. I didn't know it till I turned the main power switch on again. My TV, stove, and air-conditioner went on together, and this hole appeared in the wall, at the focal point of the three units. I'm afraid to turn anything off. I hate to think of this month's electric bill."

"Okay," Artie sighed. "That lets out widening. How about we bring a bunch of calves through, and let them grow on the other side?"

"It's a start," I said hopefully. "And maybe we can bring only one chicken, and a few dozen eggs for her to set on."

"And some pregnant fish," said Artie, beginning to smile. "Eating fish, I mean. Mackerel, Pickerel, Pike, Perch, Trout, Bass—And clams and oysters and lobster! We've got to bring cuttings from grape vines, so we can make wine, too."

"So we hire a gardener," I said.
"But look—Let's make it a female
gardener, who happens to be a
Buddhist doctor on the side. We
don't want to overcrowd the place."

Artic clanced through the hole.

Artie glanced through the hole, where the Joneses and Kerricks were leading Topaz, Janice and Soong in a rousing camp song. "It's overcrowded already," he sighed. "A Buddhist gardener-doctor isn't going to burst the seams."

We started upstairs for the hall and my phone. "And we can ask her if she has any pregnant fish, too."

Millicent Sprague turned out to be everything we needed. A firm Buddhist, she had her M.D. from Johns Hopkins, a passion for gardening, and a tankful of fish, well on the way to motherhood, which she had filched from the lab.

"This is so exciting," she said, as we assisted her through the hole in the cellar wall, taking care not to shatter her fishtank. "A new world, all our own. I have a purseful of surgical tools, and there's a carboy of ether out in the cab, which should last us until we figure out how to make the stuff ourselves."

"Books," said Artie, as we started upstairs toward the cab. "We've got to get hold of books, books on

things, lots of things. How-to books, I mean. After all, what do we know about insulation, brick-laying, brickmaking, plumbing, weaving, re-soling, glazing, or stuff like that? We've got to get books on everything, boy!"

"Go ahead," I said. "I'll get the

carboy of ether."

While Artie got on my phone, I hurried out and got the ether, and also settled up Millicent's taxi-tab, which was a bit steep, since she'd come from two states away. I trundled the enormous bottle back inside by keeping it off the vertical and rolling it along its bottom corner, damn near lost it descending the cellar stairs, then finally heaved it out the hole onto the twilit sward of Terra Two.

"We need a fire," was Topaz's first greeting to me. "It's getting chilly out here."

"The scout handbook—" I began.

"It's too dark to read it. We need a fire to read how to build one." She shivered prettily in her shorts and halter, her navel just barely visible in the gloom for any who wished to contemplate it. I saw she had a length of paper in her hand, so I took it from her and said, "Rub two dry twigs together. When they start smoking and glowing, set this on fire, and stick it into a pile of pre-piled twigs."

"Oh, I can't burn that," said Topaz. "That's our list."

"List of what?" I said, with a

sinking feeling that was becoming too familiar to my stomach.

"Other things we'll need. Honestly, Burt," she said, sweetly, sensing my disappointed slump in the gathering darkness, "we've kept it to a minimum, an absolute minimum. Essentials only. Get the things on the list, and we're all ready to go."

Artie entered through the hole at that moment, with the announcement that a gross of Howto books were on the way by special messenger. I drew him aside.

"We're near the summit," I said, handing over the list. "We fill this prescription, and Terra Two is ours."

He leaned close to the paper, squinted, then moaned softly. "It'll take us all *night* to do this!" he scowled. Then, "But if it's the only way—?"

"It is," I said. "Come on, let's get on it. And by sunset tomorrow we'll be riding the bridal barge."

"Okay" said Artie. "But let's hurry. Idabel Kerrick has 'views' on intemperance, and if she finds out those five boxes are full of cigarettes, we may come back to find a riverful of filter-tip mulch."

"She didn't object to the martinis," I exclaimed.

"She couldn't. I told her it was mineral water, and even if she knows the difference, she can't admit it. How would a temperate woman know she was drinking alcohol?"

I gave up arguing, tore the list across the middle, and Artie and I split up into a two-man early-evening scavenger hunt. One long night's work—Then a world of our own!

Four-thirty P.M. of the following day found us down by the riverside in Terra Two. The bridal barge, built of four well-trimmed chestnuts, bobbed sluggishly on its rope tether on the blue swirls of rushing river. On the brink, ready to board, stood Idabel and Henry Kerrick, Mavis and Walter Jones, Janice, Topaz, Artie and me. Soong Lai How was already aboard, toward the prow, dipping river water—for practice—in a large silver ladle hastily stolen from my kitchen.

And on the river bank beside us stood the other items that would populate Terra Two: The five cartons of smokes, a bottle of vermouth with one liquid ounce missing, half a case of gin, the scout handbook, a bottle of suntan lotion, Topaz's prayer-wheel and empty wicker hamper, a jar containing three olives (one missing its pimento), a quarter-pound of salami, Topaz's icebucket (aslosh with warm water), one gross of How-to books, a pair of molting lovebirds in a cage, two mated Irish setters, Janice's girl friend Bessie Bliss (whom Janice had promised could be maid-of-honor at her wedding), Topaz's hope chest (brimful of high-heeled pumps and scarlet evening gowns), a steel tool box full of tools, a shopping bag filled with seeds for every imaginable foodplant (and none of us knew which seed would grow which plant), three lowing calves (two female, one male), seven hens and a rooster, a nanny goat for immediate milk needs, Janice's manicure set, Mrs. Kerrick's mother's portrait of Woodrow Wilson, Mr. Kerrick's barbell set, Mrs. Jones' cookbook, Mr. Jones' fishing tackle, Soong Lai How's hand-painted lacquer rice bowl with matching chopsticks, a snow shovel (just in case), a tobaggan (same reason), an itinerant plumber named Casev Yates, Mrs. Kerrick's chiropodist (a man named Grivvel, a bit surly, but a dandy bridge-player), Millicent's fishtank (containing a pregnant pike, but no longer any other fish, thanks to the pike, who was -after all-eating for seventy), a pool table with balls and cuesticks, a deck of cards, a Scrabble checkers, chess, parcheesi, tinkertoy (thinking of the children-to-be), a mahogany banquet table, with cloth, matching napery, dinnerware set for twelve, and a ten-pound box of cutlery, the complete works of Mark Twain, Dr. Grivvel's siamese cat, Casev Yates' portable hi-fi (in whose cabinet reposed the complete recorded works of Laughing Jav Hawkins), a cast-iron weather vane, a dozen assorted-length lightning rods, garden tools, fifteen sacks of cement, and Artie's beloved "I Go Pogo" button.

I had just finished cataloguing all these items in my mind when Artie announced, peremptorily, "Okay, folks, let's get it aboard!"

"This stuff?!" I gasped. "On a four-log raft?"

"We have to, Burt," Artie explained. "The current's kind of swift along here, and no telling where the bridal barge will end up downstream. Do you want to pole the thing back?"

I admitted I did not, so we all set to work loading the raft, leaving outselves a minimum of footroom on which to stand at the launching. Wherever we grounded, there would we establish our colony.

In an hour, it was done. The sun hung low over the western horizon, the sky overhead turned a smoky crimson, Artie and I took our places beside Janice and Topaz, and Casey Yates, the nearest to the rope, prepared to cast off.

"Oops!" exclaimed Artie. "Hold it, Yates."

We all looked up expectantly. Artie gave a what-a-dope-I-am laugh, and said, "We can't leave yet. Not with the door to Earth still wide open. We've got to close it after us, so no one can follow and spoil our paradise."

"But how?" I asked. "Someone will have to throw the cutoff

switch in my cellar, and get left behind. Besides, if someone turns it on again, the door'll reappear."

"I've thought of that," said Artie. "Here's what I'm going to do. I run a line from the back of this raft across the field and through the doorway. The far end I attach to a board suspended between two chairbacks. On the board I place a heavy brick, wound with wire and then wired to the handle of the switch. Upstairs, I mount a brass ashtray on a cord attached to your parlor chandelier, Burt, and draw it back in an arc that will send it through the TV tube and smash it. I fasten the ashtray —at the upper end of its arc around an iron hook held against an electromagnet. Then—as soon as we set sail here—the line tautens, the board slips from the chairs, the brick drops, the switch cuts off the power, the magnet releases the hook, the ashtray arcs through the TV tube, and there's no more door to Terra Two, nor the means to re-create one. I figure no two TVs have perfectly identical circuits, so even rebuilding your set won't re-create that door. Besides, who'd ever dream such a thing would happen?"

We all agreed it was a good idea, and Artie hurried off to do it. We waited, with mounting suspense, eyeing the slow descent of the sun toward the shimmering golden horizon. Then he came dashing through the hole, paying

out line behind him, hopped aboard the raft, and tied the line firmly to the starboard log. "Okay," he grinned. "Cast off, Yates, and let the ceremony begin!"

Again we took our places beside the girls, Soong began to intone something singsongy and sprinkle us with river water, Bessie Bliss sobbed softly behind us, Idabel Kerrick, sipping a tall martini, eyed the cigarette-crates with a squint of suspicion, the others stood close-packed as elevator passengers and tried to look solemn, and Casey Yates cast off the line. In the pinkening glow of sunset, our little raft nosed its way out from shore, picked up speed gradually, and began to rock . . .

"The fish!" Millicent cried inanely. "Save the fish!" The large tank was indeed sliding portside in increasing acceleration, but why anyone should worry about a fish's falling into a river is beyond me, unless Millicent was concerned by the pike's delicate condition. At any rate, she dove for the tank, collided with the Kerricks, who in turn staggered against the heaped supplies, and then the ten-pound box of cutlery crashed to the heaving logs and tore right through the thick plaited grass bindings between them. The logs began to separate, faster and faster, men on one side, women on the other, and a spread-legged Soong trying to be with both groups.

And, while everybody was fighting to save the supplies and maintain their balance and not get seasick, the line leading back through the black doorway pulled taut—

There was a fractional hesitation, and the doorway vanished.

And the chestnut grove vanished, and the river vanished, and the entire landscape vanished—

And there we were, standing on the remains of my garage, with our tumbled goods crashing loudly about us, right in the center of Highway 17 in the middle of the evening rush hour. There was only one thing to do. We scattered and ran, leaving stunned and baffled motorists to get around our blockade as best they could. A police whistle was blowing loudly in the distance, and I didn't care to stick around and explain.

"How did I know you'd created a whole dimension?!" Artie said, later that evening in his kitchen, as we sipped fortifying draughts of cold ale. "Misdirection, that's what it was. The doorway fooled me. I thought it was simply an entrance, not part of the whole."

"Maybe it's just as well," I said.
"You can't get cold ale on Terra
Two. I'm sorry about you and Janice. I guess she had a right to get
sore."

"Is it my fault she was falling into the river when we switched back?" shrugged Artie. "It only took the firemen an hour to dig her feet out of the highway, didn't it?"

"Yeah, but I think it's a good thing they didn't believe her accusations, or you could be warming a cot in a cell right now. Luckily, they just figured she was potted."

"She was. In the highway."

"Well, anyhow," I said, getting up. "I don't mind all the other waste, but I wish you'd see about getting me a new television. I don't want to miss the Late Show tonight. It's got Ginger Rogers."

"I'll take care of it, I promise," said Artie. "But there're no TV-sales places open tonight. You can watch it here, if you want."

I thanked him, re-filled my mug, and went into his living room. The only comfortable chair I could find faced the set badly, so I hefted the TV out a foot, near the mouth of the air-conditioner, and turned it on. "Come on, Artie," I called, "it's starting."

"Just a second," he said. "I'm tired of ale. Let me put on a pot of coffee." I heard the click as he turned on his electric range, and then his living room wall vanished, and I was looking into a glorious Grecian glen, in which laughing maidens in filmy gowns danced on the emerald sward and

played catch with a silken ball. The trees were a riot of color, filled with every imaginable fruit, and all the birds seemed to be birds of paradise.

"Artie!" I shrieked, jumping up. "Artie!"

He dashed in, staggered against the side of the door, and grinned foolishly. "We've done it!" he cried. "Another Earth! We'll call this one Terra Three, and we won't have to stock it with anybody but ourselves!"

"Right!" I chortled gaily. "Come on, let's hurry!"

Then, as I stepped forward, I noticed something odd. So did Artie, because he halted at my side. "Hey," he said, "do you think it's only a coincidence that they all look like Ginger Rogers?"

"I—I hope it is," I said, uneasily. "The Late Late Show is Frankenstein Meets the Wolfman'."

We stared at the gorgeous vista a bit longer, then at each other, and then Artie reached over decisively and turned off the TV. The Grecian glen vanished with the Ginger Rogers movie. "How about a hand of Gin?" sighed Artie.

I followed him into the kitchen. "You're on."



BOOKS



THE REST OF THE ROBOTS, Isaac Asimov, Doubleday, \$5.95

A PAIL OF AIR, Fritz Leiber, Ballantine, 50¢

DOCTOR TO THE STARS, Murray Leinster, Pyramid, 40¢

SHOCK II, Richard Matheson, Dell, 50¢

STURGEON IN ORBIT, Theodore Sturgeon, Pyramid, 40¢

There is a fantasy of fantasies cherished alike by friends and foes of science fiction: the self-image of s-f as an enfant terrible of literature, glittering in space-mail against the metallic sheen of sharp-angled twirly-knobbed technofacts.

The fact is, s-f has a past. I am not speaking of heroic ancestries the classical and medieval voyages to the Moon. I mean the immediate line of descent common to all contemporary fiction forms, starting in the early-mid-nineteenth century with Hawthorne, Shelley, Poe, Verne, Swift, and Butler, and taking contemporary forms with Kipling, Doyle, Twain, Bierce, Wells, and London around the turn of the century.

Not even the specialty field of

popular magazine science fiction can still honestly be either faulted or favored as juvenile. It is almost forty years now since Hugo Gernsback's first "scientifiction" magazines established a vehicle for his pre-Time linguistricks; almost thirty since Howard Phillips Lovedeath consolidated his craft's Stranger-seeking cult. It is a full quarter-century since the combined readership of these overlapping circles formed the dedicated audience that underlay the "Golden Age" of the early Campbell Astounding and Unkown...

It was in these magazines that the first science fantasies by Leiber, Sturgeon, and Asimov first appeared (all three, as it happened, in 1939). Leinster was writing in the genre before Gernsback invented the label. The youngest writer in this current crop of short story collections is Matheson, with only fifteen years behind him—the same fifteen years in which s-f has firmly established itself as a book publishing "category."

Clearly, neither critic, author, or publisher may any longer responsibly either ignore the field, or overlook its failures, because of its supposed youth or lack of background.

Unhappily, neither the Sturgeon nor Asimov volumes are representative of the authors' current work. The most recent of the robot stories dates from 1957; the Sturgeon selections were all written in the early 'fifties. The fact is, neither writer has done more than a handful of s-f stories in the last five or six years. Asimov turned to science fact writing in '57; since then he seems to do just about one piece of science fiction a year. Sturgeon since his story in the special issue of F&SF honoring him in 1962 seems to have done everything but. I keep coming across movie novelizations, suspense stories, articles, columns, and reviews in everything from The Realist to the National Review...

Both authors have, also, been extensively collected and anthologized; the present collections are, then, barrel-scrapings—and as such they come off surprisingly well.

The Rest of the Robots is just what it says: all the positronic robot stories not previously reprinted in I, Robot. There is no need to report here on the two novels included in this giant package, The Caves of Steel and The Naked Sun, beyond saying that they are there; both have been too much reprinted and reviewed to need further comment. The eight short

stories that make up the first third of the book run a clear, but close, second to the group in I, Robot—and they do include such memorable items as Victory Unintentional, Let's Get Together, and Lenny.

At this size (556 pp.) and price and in view of the availability of much of the material elsewhere, this is primarily a volume for collectors and gift-givers; but it is a must for collectors and completists, enhanced as it is by revealing author's notes between the stories; and for anyone to whom even half the stories are new, it's still worth the price.

The Sturgeon collection is less even-textured. Three things for/about/against it must be said immediately:

- 1) If, like me, you missed Extrapolation when it appeared in magazine form in 1953 (as Beware the Fury), run—do not walk—to your nearest newsstand; all you need is forty cents.
- 2) Reading instructions: When you finish that first story, put the book down for a bit, before you start downhill on the others. And, if you must read the author's intro notes—leave them till last.
- So far as I know, none of the five selections have ever appeared in book form before.

There is, I am afraid, some cause for this last item. The Wages of Synergy, for instance, has one of the most compelling openings you have ever read; I wish I could say

half as much for its end. Make Room for Me will, I think, fascinate other Sturgeons fans as it did me; it seems to have been a sort of first-take on the ideas that grew, shortly afterwards, into More Than Human (the gestalt, bleshing, et al.). Here the concepts are undefined, the terminology still undeveloped, the characters arrested halfway between lifelike realism and artistic truth in one of the hoariest old s-f plots on the books. But the germ is there.

The last two stories in the book are there, I assume, only because no one else has reprinted them. I approve the motive, in general; but with such items as Fear Is a Business, The Perfect Host, and Tandy's Story (to name just the most obvious few) still not available in any Sturgeon collection—well, it seems odd, at least, that no hardcover publisher has realized that there is still enough prime Sturgeon uncollected to fill just such a giant volume as the Asimov.

The Leinster book picks up chronologically where Asimov left off, with a 1957 novella, The Grandfathers' War; this and the other two shorter, but still hefty, novelettes (both 1963), Med Ship Man and Tallien Three, are all part of the Interstellar Medical Service series.

I have never read a bad story by Murray Leinster, and do not expect to. At his standard level, he is a superb craftsman; occasionally he rises far above it, but never sinks below. These are typical Leinster standards: tightly woven, solidly structured, absorbing, credible space-science adventures. Nothing spectacular; very good reading.

If Richard Matheson had Murray Leister's structural strength and storytelling technique—but he doesn't. Shock II is, typically, full of brilliant conceptions and incomplete executions. Well, not quite full—I keep reading Matheson because about one time in ten he does what he sets out to do. That is doing a great deal, and in this book he does it once, and perhaps twice, in thirteen tries.

Seven of these are primarily horror stories One, Graveyard Shift, actually horrified me; and Crickets contained one scene of possibly unforgettable horror. The problem here, I think, is that though Matheson's characters ring true, it is more the ring of a coin on a counter than of a struck gong: the overtones are missing. We see the people, even recognize them, as we might familiar faces on the street; we do not know them, as we come to know even the most bizarre and unlikely beings, for instance, in Sturgeon's work. (This can be a matter of style. Leinster, for example, seldoms takes us inside his people but neither does he rely for effects on the kind of emotional shock which requires strong empathy.)

Of the other six entries, one is a amusing-enough Playboy-joke story A Flourish of Strumpets, and five are psychological or philosophical s-f. From Shadowed Places has a profound theme, inventively plotted, and superficially written. Mute is the kind of story that keeps me reading Matheson hopefully; this one works—and by itself would make the book worthwhile.

The Leiber collection, like Matheson's ranges from 1950 through 1962. Like Matheson and Sturgeon, Leiber is an uneven writer. Unlike Sturgeon, he is still active in s f; unlike Matheson (or, hopefully, just ahead of him) he has mastered his craft to the point where even the least of the stories hit a good average. Like both of the others. Leiber is colorful, inventive, emotional, sometimes shocking—more the pyrotechnician than the cookbook cook. And his versatility includes a pronounced flair for satire, well displayed here.

Between the warmth and optimism of the opening and closing stories (A Pail of Air and The Nice Girl with Five Husbands, both statements of the endurance and power of personal love in two very different future worlds), are a scattering of soft-satires, affectionate needle-jabs at a wide variety of human experience: art-and-culture, advertising and marketing, chess, beatniks, s-f fans, science, business, religion, politics . . .

These are gay stories, laughing

at our follies more than mocking at us. (F&SF readers will remember Rump - Titty - Titty - Tum - Tah - Tee; SF readers, The Beat Cluster; chess addicts, The 64-Square Madhouse.) But scattered among them are three of the angriest, most effective, true horror stories I have ever read: The Foxholes of Mars, The Last Letter, and Coming Attraction, all searing indictments of the anti-love, anti-laughter, forces at work in the world of today-till-tomorrow.

Leiber's effectiveness is largely due to his knack of suiting style to theme. He knows how to use both a broad canvas and a hairline brush. when to illuminate with moonglow and when with spotlights. His least efforts are, I think just that—least effort. Bread Overhead. Time Fighter, Pipe Dream (which complete the Table of Contents) are all good enterainment—and as long as editors, critics, and publishers keep their standards (of pay and praise) at the low level considered suitable for science fantasy as a supposed step-child of literature, even our best writers will sometimes settle for providing no more than that minimum, with the too-quick story for the too-quick check.

Magazine editors have the excuse of pages to fill and budgets to fit. Book editors might fulfill their responsibilities to authors, publishers, and readers better by exercising a more demanding selectivity, tossing out the shoddy "category" standards, and setting "mainstream" criteria for quality. I think they would get it—and I think they would sell more books.

THE PLANET BUYER, Cordwainer Smith, Pyramid, 50¢

Perhaps the most exciting new "name" in s-f this decade has been Cordwainer Smith's. Like most of Heinlein's early work, Smith's stories are written out of a carefully planned future history, with a uniform set of principles of sociology, psychology, and political economy applicable to all. But Smith is much more the poet than the engineer, and the shapes and colors that flare across the horizons of his framework are more reminiscent of Sturgeon and Leiber than Heinlein and Asimov.

The Planet Buyer is not, to my taste, the best of his work, and if you read the magazine version (The Boy Who Bought the Earth) you will probably find very little more that matters in this expansion. But I have not yet been able to put down a Cordwainer Smith story unfinished—including this one.

REGAN'S PLANET, Robert Silverberg, Pyramid, 40¢

I cannot say the same for Robert Silverberg, or for his fairly entertaining new novel. Silverberg has been writing only ten years—but because he is one of the most prolific writers ever to hit the s-f field,

he has packed half a lifetime of writing experience into that decade. And he has learned; he is one of the few men who might, with respect to them both, be compared to Murray Leinster for honest craftsmanship. He rarely lets a reader down; but it is just as rare to be uplifted—out of yourself, as they say—by a Silverberg story.

The cover blurb calls Regan's Planet "a wild and wacky novel of the next World's Fair." The adjectives are a bit strong, but the general impression is correct. The Fair is on the Moon, the protagonist a super-enterpreneur in 1992's Bigbig-business network of global finance; the tempo is fast, with no intrusive "message" or complex characters to slow the pace. Moderately funny, occasionally pointed, consistently well plotted and smoothly written. Good commuter reading.

THE GREAT TIME MACHINE HOAX, Keith Laumer, Simon & Schuster, \$3.95

One might almost say the same, with a different synopsis, for this novel—but not quite. Keith Laumer's first story was published only five years ago. He is a Captain in the Air Force, and for a part-time writer, has turned out a prodigious amount of material in a short time. Superficially, the similarities between Laumer and Silverberg are considerable: great productivity, continually better craftsmanship, strong plotting, fast action. But—

With the exception of the Retief series, Laumer has rarely repeated himself in content or in technique. One feels that with this book he did less than he might have, that he was perhaps trying to write a "purely commercial" novel. Once again, the jacket blurb is close to accurate when it says, "an explosive mixture of danger, excitement, and high good humor." (Read "enjoyable" for "explosive.") More significant: behind the fun and games, the not-yet-expert technician has permitted the reader a glimpse of something vigorous, assertive, and stimulating—persumably the author. If he decides to use the craft he is rapidly acquiring to communicate as well as entertain, if he learns to say more instead of less. Keith Laumer may well become a very good writer.

ESP, A PERSONAL MEMOIR, Rosalind Heywood, Dutton, \$4.50

Whatever your bias about ESP and you are rare indeed if you have none—this book will not fit your preconceptions.

First, the author herself fits no stereotypes. Neither dry spinster nor dreaming widow, fluttery cultist nor flatfooted statistician, Mrs. Heywood is a well-read, witty, thoughtful, sophisticated woman, a wife and mother who has worked as nurse, housekeeper, and diplomatic hostess for many years in many parts of the globe. Second: her distaste for spiritualist-super-

naturalist mysticism is as strong as her contention that most "scientific" laboratory techniques are inapplicable to investigation of ESP phenomena.

She points out that all alleged ESP experiences consist of releases of information (or fantasy) from the subconscious mind of the subiect, and that there are other areas of human experience involving similar emergences of subconscious thought—"intuition," "creativity," "religious experience," as examples. We know almost nothing about the nature or mechanics of these processes. Mrs. Heywood proposes the hypothesis that some mode of exchange of information on a subconscious level is a probably universal natural human function, less understood than other kinds of communication because of the blocks between our conscious and subconscious minds. The road to more comprehension, and to reliable testing procedures, she says, is through a greater knowledge of the actual functioning of the subconscious. Perhaps when we know more about how and why information is stored and released in the unexplored areas of the mind, we can determine more accurately how it arrives there.

To this end, Mrs. Heywood has written this "personal memoir," so as to present her own ESP experiences in the fullest possible context. She believes it is necessary to

examine such incidents in the framework of surrounding circumstances, with due attention to the personalities and emotional relationships of the participants, and to the inner emotional and outer social and intellectual climates of each experient. Some of the book is dull; the author apologizes in advance for this, but maintains that the duller portions of her own history are as significant in a study of her claims to ESP as the drama often surrounding the incidents themselves.

I think her approach is correct, and that the only appropriate tech-

niques of investigation are those of the clinical psychologist. Certainly, I found here a more balanced, intelligent, and productive approach to investigation of ESP than I have ever read elsewhere.

One (inevitable) quibble: This book was published originally in England. The author documents her frequent references and quotations conscientiously. Why did the American publisher not correct the footnotes to show American publishing data for those items available here?

-JUDITH MERRIL

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Science fiction, as a separate medium and field of expression, is catching on all over the world at present. In Italy it has been less than four years since the first anthology of SF appeared (translated American and British stories) and SF has followed an exponential growth curve ever since. In 1963 in Trieste the first International Science Fiction Film Festival was so successful that it was repeated in 1964 and appears to be an established part of the summer season there. More and more SF is being read in Italy in both books and magazines and all but a microscopic percentage of this is translated.

Of the original Italian SF some is very bad, outright imitations of American-British SF laced with characters named Vladimir Clarcke, Thomas Cochran, Lady Benz and Ayme Algys. But this might be called an attempt to come of age, you must imitate what is existent before you can advance into uncharted territories. Some Italian writers are already doing this, and Ernesto Gastaldi is one of the best. THE END OF ETERNITY is a story that is typically Italian—and typically science fiction at the same time. It reflects the European and Italian mutual suspicion of all the atomic powers and the typically Italian assumption that at heart all politicians are dishonest. And, with Latin ease, it is not only science fiction but fantasy and a dream all at the same time.—H. H.

THE END OF ETERNITY

by Ernesto Gastaldi

(translated from Italian by Harry Harrison)

ROME SLEEPS. THE AFTERNOON heat burns the millennium old ruins, scorched and crumbled by the sun. It is the hour in which the air seems to stop moving, dwelling

on memories of its past, for in this air there is something of the breath of the Caesars, and of the millions of citizens, now dust. Perhaps it is the air, saturated with the sweat of the legions that weighs nostalgically on the truncated columns of the forum.

It is a cemetery of memories. Like a ravaged ant-hill, its corridors and cells uncovered, in this muted hour Rome displays the ancient scars which departed barbarians have inflicted down through the ages. It is like an ant-hill dried by the sun, in whose useless remains stupid beetles wander about, tirelessly. The sun's piercing light heats the pavements built to be skimmed by the light steps of vestal virgins trodden by the victorian feet of gladiators and worn smooth by the sandled feet of monks. It brazenly illuminates the walls of hidden cells, picks up the marble limbs of gods fallen into disgrace.

Like beetles perspiring Germans wander among the ruins, legs rosy with the sun, scarves tied about blond ringlets. And feet. Enormous feet of civilized barbarians, bringing back to Rome a little of its civilization which has been wandering about in the Northern fogs for ten centuries.

For the Romans of today it is a sacred hour, the *pennichella*. They sleep, and if they sleep a little longer or a little deeper than in other cities, it is perhaps because time stops in the streets and squares here. One breathes eternity.

THERE ARE JUST TWENTY MINUTES TO THE END.

I am Romolo, the chauffeur for

His Excellency the Minister of Foreign Affairs. I am alone in the world and old. I am no longer attracted by wine nor by women. My soul is as calm and inoffensive as a pool of still water. I look to be what I am: alone, old, calm and inoffensive. Rome is my only friend.

As you must know, as everyone now knows, the Russian ultimatum arrived unexpectedly, while in Geneva they were still discussing disarmament. The revelation was made that hidden somewhere in subterranean Rome is a bomb of one hundred megatons awaiting the electronic command to explode.

It is a novel idea to neutralize the defences of the whole western world while at the same time rendering useless all their detection stations. The missiles will remain in their places on the launching ramps because the atom bombs have been secretly set under the enemy's cities.

The destruction of Rome is to be an example, like Hiroshima. The Russian statement leaves no alternative. Surrender or death.

There has not been time to assemble the Italian parliament. The Minister of Foreign Affairs had me called in great haste, and gave me his instructions. I have just put his family into the black Mercedes and now I am waiting, with the motor running, in front of the Ministry.

In Rome no one knows what is happening: why spread panic? If the bomb explodes there is no safety. And an excavation is impossible in the few minutes that have been granted us.

The Minister is standing near the telephone, his eyes on the black instrument that is connected directly with Washington. He sweats. He is like a condemmed man already seated in the electric chair, hoping desperately for the bell to ring announcing his pardon.

They are waiting to hear from Washington. If they surrender then Rome is safe.

I know what is about to happen because I listened shamelessly behind a door. I am alone in the world with very little pride, and getting on in years, it is only for Rome that I am sorry.

Ten minutes have already gone by. The Minister's wife is nervous, she knows nothing but she is annoyed at having been called here so suddenly. His daughter is cross and complains because she had had to cancel a hairdresser's appointment. I ignore them, I only want to enjoy this last look at my city. I want to see everything closely, clearly as never before. I want to take it with me "after". Wherever after may be, of course.

Cars have begun to appear. Romans who took short Pennichellas are beginning to stir.

Where is it? The bomb, I

mean. Under the Quirinale, perhaps, or hidden beneath the Colosseum—or in some subway tunnel.

A car brakes to a squealing stop next to mine and three highly-excited elderly gentlemen alight. Their faces are enough to tell me that they *know* as they ask to be taken immediately to the Minister.

I lead the way and take them to the Honorable's office. He is still there, tense, at the telephone: he seems very upset.

The three enter and begin talking in desperation, they are scientists, and in their opinion it is a death sentence. With a hundred megaton bomb not even the dust of Rome will remain. They speak of the space-time continuum, mathematical equations, an explosion of such magnitude will produce a gigantic distortion. I don't understand it all. Does it matter?

The telephone rings and everyone stares, wide-eyed. No one answers it. The Minister reaches for the instrument, hesitates, then raises it. His voice trembles.

"Pronto."

He listens and his eyes fill with tears, he nods and puts back the receiver. He turns to the others, trying to assume a solemn attitude, and then stammers, "It is the end. It will explode."

The three scientists look horrified, still unbelieving for an instant then without a word run towards the stairs.

"Where are they going?" I ask,

but he doesn't answer me. He takes my arm and looks at his watch.

"Ten minutes," he murmurs.
"Ten minutes to save ourselves." He
pushes me in front of him and we
hurry to the car. Some of the office workers turn and look at us,
puzzled.

We scramble into the car. The Minister doesn't explain but his terror is so apparent that no one asks any questions. "Drive!" he shouts!

"Where to?"

"Wherever you please but drive —drive out of Rome!"

I hammer the car into gear and we scream forward, a hundred kilometers an hour. The Minister's wife is crying and the daughter keeps repeating over and over, "Why? Why?"

Leaning on the horn I turn into the Aurelia at 180 kilometers an hour. Saint Peter's is already far behind. The police are stopping traffic to give me the right of way. Green, yellow, red. On, on, on. Nothing makes sense anymore. Those we see from the car windows are ghosts—ghosts of the dead. We, too, are ghosts.

Everything is about to end. Seven minutes more.

Now the daughter, her eyes popping with sudden panic seems to begin to understand. The Minister is muttering a steady stream of invective against "Those in Washington" who have permitted

the destruction of Rome. But fear sets him stammering as he stares repeatedly at his watch.

Watches, clocks everywhere. They will all stop at the same hour —in five minutes.

An old woman crosses the street and I cannot miss her. Her body flies about thirty meters and lies motionless.

"Don't stop, go on, go on. You've killed no one. She only had four minutes to live anyway. Go!"

I am calm. It feels as though all this is happening to someone else, this insane and useless chase. The mushroom will catch up with us anyway, five million degrees, we won't even feel it.

It will be like a distortion they said, in time and in space. No, in space-time. What difference does it make? My head is empty.

Everything I see around me will be ended in three minutes more. Two minutes. The end of Rome is the end of the world, the old legend is about to come true. In Rome's place there will be a hole fifteen kilometers wide and twohundred deep. But time-what about time? One minute to go. The road marker says seven kilometers out of Rome. The daughter is crying now, she has stopped worrying about the hairdresser. We are the only ones trying to escape. The Minister, realizing the impossibility of total evacuation, is trying to successfully carry out a partial one —his own.

Half a minute. The Minister trembles while his wife and daughter cling to him. The second hand reaches zero hour and I feel like shouting to the farmers planting in the fields, to tell them to stop. The time for planting is past. The earth trembles with horror and a terrible light grows up from Rome.

It is the end. The road surface leaps against the car and I slam on my brakes. They scream, the car plunges and shudders to a stop in the ditch. A hot wind tears at us. I cling to the wheel as from behind us the wave of blinding light advances. The car is bathed in brilliance as a roar crumbles land and sky.

Flames. Smoke. For a fraction of a second I know I have stopped existing, yet I am alive again. All about me the landscape is cremated. The sky is black and seems to be rising higher, higher, higher, detached from the earth.

I look down at myself. I am naked but unharmed. The Mercedes has disappeared. The farmers, the Minister and his wife, the daughter all are gone. I am in the very center of a vast, burned area. Around

me the horizon is blocked off by low hills.

From a clump of trees at the edge of this dark area of burned grass someone is peering at me, and I raise my arm in greeting. He steps out hesitantly and others appear, starting towards me. The man who acts as their leader advances, holding a crude spear before him and looks into my eyes without fear. They are all dressed in sheepskins and armed with spears and lances. I see them without understanding.

The chief stops an arm's distance away from me and says, "We saw your signal from Albalonga and we came. Here I will build my city. Who are you?"

"I am Romulo, I drive for . . ."
"Drive?"

"I drive . . ."

The chief looks at me challengingly and says, slyly, "I'm the driver here. I am in command. Here I shall build my city. I am Remo and the city shall be Rema."

At last it is all clear. I know that I must kill this man. I shake my head and sigh:

"No. It will be called Rome."



From the wattle-scented Antipodes Ron Smith sends us the following reductio ad absurdem of three beloved SF plots which will never be the same again—and a good thing, too.

TRIPSYCH

by Ron Smith

The Presence

YES, I THOUGHT, THAT WAS THE answer.

It had taken a long time, but now I knew, and I had to admit it. There was something wrong with me.

That was what my psycho-robot had been trying to make me understand before I wrenched it from its floor boltings and smashed it against the wall.

If I had listened then, I now realized, I would have saved Blanche all of the pain I subsequently caused her.

If it hadn't been for George! The thought hurtled through my brain savagely.

And now, suddenly, my old cunning returned. After all, hadn't he really been the cause of it all? Hadn't he been the one who suggested that I buy the new 1997 model telepathic-robot radar-controlled Joybug, so I could outrace

the Speedway Patrol Snifhounds? Hadn't he been the one to suggest that I buy a new three-acre fivelevel home (with each level split into three sections) only 1500 miles from work? Hadn't he, then, been the one to suggest that I quit my job at Amalgamated Robot Button Corp. ("The Buttons That Sew Themselves On!") so I could look for other employment more in keeping with my new social position, as owner of a new Joybug and a home in the suburbs? Hadn't he. when things didn't work out, been the one to suggest that I buy the stun-gun? And, finally, hadn't he been the one who showed me how it operated and then encouraged me to use it?

No, he hadn't been. I realized that now.

He'd been the one who had suggested that I go to the psycho-robot.

The thought shot through my

head like the jab of a hypodermic needle: I shouldn't have shot him.

It was true that he was only stunned, but he would be stunned for life.

And what would Blanche say when she found out?

I took another Mars-Mellow from the Bot-tender across the bar from me, pondering the question deeply. I had half finished the drink before I remembered. A smile snaked across my mouth. It was going to be all right about Blanche.

I had shot her too.

Vaguely I wondered why, but I waved the thought away with a finger of Mars-Mellow.

I had shot them. Or was it me? Now I stiffened, my fingers curling tightly around the glass. What was it I was trying to remember? Something in the back of my mind stirred, like the dark, oppressive presence of an alien thought-entity. It covered my mind like a thick, misty, chilling cloud. I shivered.

Something was wrong! The pain welled up in me, as if a wide, searing streak of burning sulfer had flamed through my brain. I cried out.

And then, from a distance across half infinity, I heard a voice. A soft, metallic voice. I opened my eyes and saw that it was the Bottender.

It was hard to understand what it was saying, but finally the words

came through. "Sir, you've hurt your hand . . ."

I looked down and saw I had crushed the empty glass.

Or had I? Suddenly I heard the hideous, alien laugh of the Presence within me—the Thing, I now realized, that controlled my thoughts and actions, as if I were no more than a robot, to be turned on and off at will. The Thing that would destroy the world, for whatever its purpose, if I did not think of some way to stop it.

"Hadn't you better do something about your hand?" the faint voice of the Bot-tender was saying. "If I may suggest, sir . . ."

"It is nothing," I answered softly. I picked the robot up and threw it against the wall.

Then I stood, my arms still halfraised, frozen. A trace, a thin whisp of smoky thought, remained of my sudden revelation.

. . . if I did not think of some way to stop it.

I smiled in triumph. It was too late for the Presence to stop me.

I took the stun-gun from beneath my plasti-cloak and stuck the muzzle in my left ear.

Reunion

"That was a fine meal, Grandma," he said after swallowing the last pill. He leaned back in his forma-chair and tried to belch.

"What's the matter, son?" Grandma asked.

"I can't belch," he said.

"It's those artificial artificial food-pills they feed you on the ships, that's what. They upset your stomach."

"They're all right, Grandma. You've got old fashioned ideas. One thing, though, they aren't the same as the real thing."

"Artificial food-pills are what I've eaten all my life. They better not try to put no synthetic substitutes on the market now. I won't have it."

"One thing I'll say for you, Grandma, you've got spunk."

"That comes from good living, son. How was the voyage? You haven't told me about it yet. Your mother worries, you know."

"She shouldn't. There's nothing to it. With faster-than-light travel, it's like going to Chicago on the tube-train."

"That's nice. She doesn't worry much anyway, son."

"Where is she this morning?"

"She and your father are still in bed."

"Oh. They were out kind of late last night. Didn't they know I was coming?"

"They figured you'd want to be alone the first night, son."

"Oh. Guess they didn't know I was only going to be here one night. I heard them come in, but I was asleep so I didn't get up. You learn to hear things in your sleep when you're out in space where there's nothing but silence. What was all the singing about?"

"Well, son, I suppose they'd had a little too much to drink."

"How's Mary, Grandma?"

"You mean that girl you had before you went away?"

"How is she?"
"She's dead, son."

He brushed his eyes with the sleeve of his uniform, to keep them from blurring, and tightened his jaw. "How did it happen, Grandma?"

"Her second husband killed her."

"Oh? She wasn't even married when I left, Grandma."

"Things happen fast, son."

He turned his head away for an instant, to compose himself. His steel-gray eyes contracted to needle-points.

Grandma looked up from her half-finished plasti-plate of artificial food-pills. "What is it, son?"

"Nothing, Grandma," he lied. The room had seemed to grow very dark, as if it were filling with space. "Mom and Dad," he said. "Do you think they'll be up before I leave? It's almost dawn and I have to leave in ten minutes."

"Goodness no, son," Grandma smiled. "They just got to bed."

"Oh. Well, do you think they'd mind if I woke them—just to say goodbye?"

"I wouldn't do that, son. They were out all night and they're pretty tired."

"I know. But I would like to see them before I leave. Do you think if I just looked in their room, without waking them?"

"That would be nice, son, but I'm afraid you can't."

"Why not, Grandma?"

"The door's locked, son. Your father always locks it. You see, a couple of times I've opened it—"

"Oh. Well, didn't they say anything last night when they came in?"

"Sure, son. They said lots of things."

"I mean about me."

"Well, son, no, I can't recall that they did. I did tell them you'd gone to sleep and they said, "That's good." But I don't recall them saying anything else.

"I guess they were tired."

"They were a little drunk, too, son."

"Well, Grandma, I guess I'd better get going. Got to get back to the ship." The lean youngster got up from the table. The old woman looked up at him without moving, her fingers playing idly with an artificial food-pill.

"I wouldn't fret about it, son," she said wisely. "They'll be here next time."

"Yes," he said, sighing, "but I guess you won't, Grandma. So this is goodbye."

"Goodbye, son. Have a good

trip."

"Thank you, Grandma." He turned and walked to the automatic sliding door. It slid back automatically. On the threshold he turned and looked back at the strange kitchen. The low cushioned benches, the streamlined table, the smooth design of the automatic artificial food-pill indicator along one wall, the color of the walls themselves, were all new to him. "We redecorate every year," Grandma had said. "It was even prettier year before last."

He smiled dispiritedly. He'd never know. He took one last look at the ancient, wrinkled woman sitting there. "Things can sure change in a week," he sighed.

He turned and walked quickly down the spiral rampway to his copter. He headed toward the spaceport. The ship was waiting. He was going home.

The Alien

AFTER IT WAS OVER, YOU BOTH lit up and lay quietly, smoking.

"You're an alien, aren't you?" you asked her.

"No," she said, looking at you queerly.

"No?" You looked at her in surprise. She was lying with the sheet turned back and she hadn't changed shape yet. "I thought you were."

"I'm not," she said.

"How can I be sure?"

"Haven't I proved it to you already?" she asked, smiling.

Her look was innocent enough, but you knew she was playing a game. Beneath that facade was a mind as sharp, as calculating as yours. Almost.

"I know you're after the Secret," you said, launching a frontal attack.

She turned her head and looked at you. "What secret?" she asked.

"Don't blow smoke in my face," you said.

"Sorry."

"And don't try to pretend you don't know about the Secret."

"All right, I won't pretend. But what is it? If it has anything to do with boys, honey, I can tell you—"

"You know what I mean. You know about the Secret. I'm not easily fooled. You've been on my trail for months."

"And I tracked you down and got you up here to learn your secret. That it?" She smiled at you, a loose, wet, seductive smile. She was playing the game well.

"That's it," you said.

The smile disappeared. "You're nuts," she said.

"It's no use," you sneered, pulling the sheet up to your chin. "I've got you figured."

She laughed. It came from her throat, a bubbling sound like the choking of a wombat. "And I've got you covered," she said.

You froze, your flesh crawling, as if the sheet over your limbs was a gelatinous mass of pulp. A stream of ice water flooded its way down the inside of your spine. You looked at her, warily.

And then, suddenly, you

laughed. You knew she was bluffing. There was no place she could have concealed a weapon—not even under the pillow. You had the pillow.

"What are you trying to pull?" you snarled visciously.

"Pull?" She feigned puzzlement, looking at you as if she was an innocent child who had just had her pigtails yanked for the first time. You knew better. "Pull?" she repeated. "Pull? I'm not trying to pull anything. I was just joking. You know, sheets, cover . . ."

"All right, baby," you said, flinging back the sheet and standing up. "Play it your way; but you've played it out, baby. The curtain's down, the third act's over and the popcorn's stale."

She was looking at you, her eyes wide and staring. You knew you were hitting her; she wasn't that good an actress.

You started putting on your pants. "Know what I mean?" you asked.

She said nothing; her tongue was hanging out.

"What's wrong?" you countered. "Do I surprise you? Did you think your seduction would really work? Well, it won't. You thought to get me under your control, but it won't work. And you won't discover the Secret. There's nothing you can do. You're powerless until you do discover the Secret. And you can't trick it out of me."

"To hell with your secrets. You

owe me-"

You cut her off. "It won't work," you said. "You'll get nothing out of me."

me.

She was rising out of bed now; her face was turning purple. The thing to do was leave, fast.

"Why you lousy, stinking bum," she was saying. She was defeated and she knew it. "Listen, you

can't just walk in here and—"
"You aliens will never learn,"
you sneered.

"You're nuts!" she screamed at

you.

You shut the door and slid quietly into a deliquescent puddle and flowed down the hall, laughing inwardly.

It was, after all, your Secret



ILLUSION

Our outpost on the moon supported one and only one so that duty tours there (ten years earth time) became a lonely chore which no one coveted. To ease the pain, the Watchers learned strange habits such as Zen and dream sculpture; golem manufacture and peyote cultivation. One might dare even chalk a pentogram now and then.

Illusion became occupational hazard as well as salve for lonely wounds. Reports came of capsules in lunar skies just big enough to swallow but of all communiques none topped this: "Look, no hands," from a moonbrain who thought himself a cheese.

We had a good deal of interesting information about this story's author, but unfortunately it seems to have been eaten by an armadillo (the information, not the author), and all that we can tell you now is that he is in his twenties, lives in New York City, skin dives a lot, and writes a lot. There is nothing whimsical about his first F&SF story about Clinton and "the movies", and while it is set in the future, it has—as all such stories, if good stories, must have—implications for the definite here and now.

BETTER THAN EVER

by Alex Kirs

JOE AND MONICA WENT TO THE Movie. Like everyone else, they were gone for a month. Clinton met them at Noordberg's Thursday party—the one you went to to get out of going to the one on Saturday—and treated them to an et tu stare.

"Welcome back to the real world," he said.

"Clint, don't be like that," Monica said. Clinton saw that she had been aged by the experience. To his certain knowledge—compounded of a five years' acquaintanceship, a thousand bits of awed gossip, and some eerily inappropriate newspaper headlines—her tawny eyes had looked out over the ruins of one of the most creepily disastrous love affairs imaginable, with the same

expression of mild discomfort with which she might announce a headache. You looked at the eyes now and thought: This girl has suffered. He felt like telling her unpleasantly, You have too much makeup on; go wash your face.

"Clint's still deepening his rut," Joe said. Clinton smiled.

"And soon I will disappear from sight in it, hmmn?" Joe's face was even worse; all the old, familiar tics had been ironed out. If a souvenir balloon, subsiding into wrinkles week by week on the mantle, had had a bit of fresh air valved into it, it would have inspired much the same feeling; it looked nice, yes, but how long would it last? Clinton stared coldly at their faces; that the change had been

predictable made it no easier to stomach. The women came out haggard and viciously serene; the men, looking calm and dedicated and noble.

"Clint, why don't you give in?" Monica said. "You're getting bitter, and there's nothing so useless as a bitter nonconformist."

"So now I'm a nonconformist?" he asked her, pleasantly. "And bitter as well. Why is it I seem to remember a time—excuse me, it was so terribly long ago—when we all agreed it was a matter of individual choice?" He thought, If she says, "We have come to our senses, now," I will bite my fist. And then he thought, Maybe I really mean it. But even Monica occasionally knew which arguments could be counted on to kick her in the shins.

"Oh, you're impossible," she said. And then, to Joe. "And it would have meant so much to him, too." Joe tousled her hair, looking noble. Clinton felt himself in the position of a kitten playing with a ball of wool; it was interesting, and lots of fun, and so he continued playing . . . perhaps, if he played long enough, he would find himself disentangled, able to let

"Would it, now?" he said. "You tempt me; why not tell me all about it?"

"It was the greatest experience of my life," she said.

"You should be ashamed to say things like that about your life," he said, suddenly tired. In the background, amid couches that looked like coffee-tables and coffee-tables that looked like couches -it made no difference at all on which you sat-Noordberg was cosying up to Janet. Noordberg was short and plump, with little, stupid eyes; he could not smile, or light a cigarette, or say hello, without looking sinister. He had the manners of an octopus, and a heart of gold. Janet had the sort of politeness that dealt with sex fiends as if they were somebody's grandfather; grandfathers, treated, could not believe their luck and coyly turned their faces away for a moment, growing tusks.

There was no reason to stay any longer; Clinton pointed with his chin, and Joe and Monica turned to look. "What is that theme they play," Clinton murmured, "when the cavalry comes over the hill? Excuse me: Good night." He drifted away into the throng; a sociologist, tracing with a dull spoon the course of his progress, would have discovered a beautiful graph; Noninvolvement at the Perimeters of Small Groups. Coming up behind Janet, he put his nose possessively in her hair. She turned her good, delicate, unpretty face to his; was it possible there was relief in her eyes? He thought, Oh, she really loves me.

"Time to go, pet," he said fondly. "We have a date, remember?" Yes, she loved him; between showing consideration for him, or for Noordberg, there was no need for decision at all. Rising, she smiled.

"Such a nice party, Mr. Noordberg," she said. "Good night."

"Good night, Noodle. See you," Clinton said. Noordberg told them Good night and how much he had enjoyed having them; possibly his heart was broken, but he just looked sinister. Joe and Monica—and several others—waved faintly as they went out the door.

Later, in the dark, his arms in their habit around her as she listened through his skin to his slowing heart, he blew a strand of her hair from his lips and said: "Joe and Monica are back. Did you talk to them?"

"Yes. You?" she said. He nod-ded.

"Same old story," he said. "You know, I'm getting very tired of being Above All That, but it's still true; I just don't see lopping a month off my life—I have a life, you know—watching some goddamn movie. If only they didn't come out looking so noble, smelling at every pore of having been through a transmogrifying experience." He removed an arm from her, groped, found cigarettes and lit up. He breathed a cloud of smoke out into the dark, carefully aiming it away from her hair.

"You know what Monica said to me?" he asked. "She said, 'It was the greatest experience of my life.' My God, if I had had a life like Monica's, I would be sitting on a mountain wearing a yellow robe, shuddering whenever a man came within fifty miles."

"Clinty, Monica's not very bright. You should be kinder to her." And then, reflectively, "Not exactly a movie; they all tell us that. Somehow I get the impression it isn't anything like a movie at all."

"Movie, shmoovie," he said. "Besides, think of the result. Can you imagine me going around being Calm, Dignified and Noble? I'm not the type. And you know, it would be more of a consolation if it weren't so damn obvious that an awful lot of people are the type." She stirred then, half sitting up.

She said: "Clinty, you know how Noordberg does? The way he looks at you as if he were a mad scientist and you were the retort in which he was going to mix something dirty?" Clinton chuckled in spite of himself; wither politeness, now?

"Good old Noodle," he said.

"Well, he was one of the first to go, and ever since he came back, he doesn't." In the darkness her face could tell him nothing, nor his, her; he frowned.

"Are you kidding? I've seen him a dozen times since he came back, and believe me, he's the same as ever. If anything, he's worse." But mentally he began to tote and tally, wishing for a better memory. She continued:

"No, Clinty, it's not the same at all. He tries to, but it's just going through the motions. As if he thought you expected him to, and didn't want to hurt your feelings, or make you anxious about him."

"Kiddo, go to sleep; you're already dreaming. Still, it's a nice idea. Everybody doesn't have to end up noble?"

She made an affirmative noise, reclining, choosing her own side of the bed. He settled back to wait for the extinguishing breath of sleep, and for tomorrow, which would be a better time to wonder whether it was reassurance he had harvested, after all.

"They must be government approved," she said suddenly. "Must-n't they?"

"Mustn't who? Oh." Clinton blinked; it was an odd thought. "I guess so," he said. "Otherwise somebody would have raised a stink. Unless you're thinking about the money, how much it costs? Financing, friendly banks; sure it's government approved."

"Umn," she said; he felt her falling away, diminishing, receding into the void of sleep. At the last possible instant before total unconsciousness, she murmured:

"Joe and Monica don't need to hold hands all the time, now."

He had thought himself worried before; now he worried. She was cool and calm and resolutely considerate always; he had taken her to his bosom perhaps in some measure because, when he trumpeted at the world his *l've got problems of my own*, her unverbalized answer had been, *Enough for both of us?* In a world where everybody depicted love in comic-strip colors, they found richer expression in halftones; they did not make scenes. Gone back over, the conversation was the closest she could ever come to telling him she was deeply troubled.

It was some little while before Clinton fell asleep.

Clinton worked as an account executive in an advertising agency. He had a radical and extremely personal view of his situation: he thought it was like being a Boy Scout in a large room filled to the ceiling with cotton candy. You coud breathe, it was delicious. and there was plenty of it-but you could not see your hand in front of your face, much less find two sticks to rub together. He told this to everyone; they thought, How original, how bitter, and laughed, sometimes a little vaguely. By the law of averages, he ought to have met somebody who would have said, What have you got against contentment? so that he could have replied, Contentment with what? But he never had.

He lived seven blocks from his office, and always walked home, smiling devilishly as he outpaced

the taxicabs of his trapped superiors enroute to Sutton Place. The evening after the party, on impulse, he walked a couple of blocks out of his way to the converted brownstone in which Bernie lived. Bernie was an artist. and would have been an exceedingly expensive one, if he had not heen rich. It did not matter that he was really an artist, and painted the large, disturbingly whorled emptiness he would have painted if he had been starving in a loft; in their large repertoire of smiles, gallery owners have a special one reserved for the very rich, and it was the only one Bernie ever saw.

Clinton walked up, on deep plush; the door opened to his knock. Bernie, half-dressed and carrying a dirty rag in one hand, greeted him with a broad smile.

"Clint! Come on in. What have you been doing, anyway—I haven't seen you since . . ."

"Since the Movie," Clinton said easily, entering. As always, he stopped in front of the painting that faced the entrance. It was a large thing, covered with countless overlapping concentricities that seemed to diminish infinitely amid bitter smoke. Bernie had a title for it, but like most artists, Bernie was a literary imbecile; Clinton called it Kinsey in Hell, and found it tenaciously disquieting. As usual, it held his attention for some seconds; when he turned, it was to find Bernie seated on the

floor, working on something in his lap. Clinton smiled; it was exactly his idea of how an artist should polish something—tailor-fashion on the floor, lovingly absorbed. Then he made out what it was Bernie was polishing. He strolled over and sat on the floor, facing Bernie.

"Going hunting?" he asked, and wondered why his voice sounded so odd.

Bernie held the rifle out to be admired. He did not hold it clumsily—artists, whatever their faults, do not hold things clumsily—but between the way its essential function dictated it be held, and the way he held it, there was an enormous and unbridgeable gap. Yet, somehow, Clinton did not find this sufficiently reassuring.

"Isn't it beautiful?" Bernie asked. "All my life, I never realized the . . . depth to these things. Do you know they're almost a perfect symbol for power? Pure power? Think of it, curled up dormant in there, sleeping in its little nest in a cave of steel, ready to burst out instantly at the slightest call. Think of it! The perfect symbol for power; hard and cold but turgid with latent flame and noise."

"Bernie . . ." Clinton began.
"They get dirty, though. The

minute you hang them up, they attract dust like a magnet." Clinton exhaled—why was it, with relief?—and tried again.

"Bernie, you've been listening to the wrong salesman."

"Huh? What? You mean you don't approve? Clint, you're the last person on earth I would have thought . . ." His face was so crestfallen that Clinton had to laugh.

"No, no—it's just that you were quoting the wrong sales pitch. The one you gave is the one for pistols, you know, like on TV." He made shooting motions with thumb and forefinger. "That's a rifle. You're supposed to look at it in a combination of the ways you would look at a Patek Philippe watch and a . . . and a jet plane."

"Oh," said Bernie. He appeared to think for a moment. "You know, it's impossible to buy a pistol in this city. I tried and tried, and it was like trying to get permission to buy ten pounds of heroin. It's not just the red tape; it's the attitudes of the people you have to go to. Pure Kafka." He means Orwell, thought Clinton. He just doesn't know the difference.

· "Bernie, tell me about the Movie," Clinton said.

"What's to tell? Why don't you just go and find out for yourself? Monica was telling me about you just this morning, Clint. Monica is very upset about you."

"Monica should have her mouth washed out with soap. Come on, tell me what happens in there after you go in and they take your ticket and you sit down." "Oh, you mean, the technical part? That's funny . . . because afterwards you just don't remember very much of that. It's not just a . . . you don't just sit there, I mean. And it goes on for a month, so there are intermissions, only you do exercises instead of just walking around. And you eat a little bit, just to keep the internal muscles in trim, because they feed you intravenously while you're out. But nobody really pays much attention to the . . . technical part."

"So tell me the story, then," Clinton said. "Come on, Bernie, gimme the plot"

gimme the plot."

"But, Clint, that's impossible. It's too big . . . there's too much, it would take a year. And some of it I'm not even smart enough to explain. I haven't got the . . . I'm not a wordsmith, Clint. Could you imagine somebody painting a Rembrandt from a wooden mannikin, for chrissake?"

"Very easily," said Clinton softly. Bernie opened his mouth and then closed it again and looked doubtfully down at the floor. "Bernie, there are people who can paint Rembrandts from mannikins," Clinton said.

"And I can't, you mean? Well, all that has changed, let me tell you!" Bernie stopped, looking at Clinton, who beat down the sudden, betraying intensity.

"By all means, tell me," Clinton said.

"It was the greatest experience of my life," said Bernie, in a holy voice. "It shook my very foundations and rearranged them. It made me realize, absolutely, what I had been doing wrong." He looked at Clinton, not defiantly, but as a man looks who has told the truth, and is awed by it.

"Bernie, what are you painting now?" Clinton asked, and sighed for saying it; he had had to.

"It's over there by the window," said Bernie. Clinton got up and strolled toward the easle. He did not have to force himself to stroll: he knew in advance almost exactly what he would see.

It was on the easel, and unfinished—and yet it was finished beyond necessity or sense. On the very large canvas, two big young people, boy and girl, held hands and gazed out over the viewer's head. They were handsome and muscular and clean; he bare to the waist, she in blouse and shorts. Behind them, vibrant with earlymorning light, stretched a pastoral landscape; high in the sky was the meticulous glint of an airplane. Clinton would have described their expressions as being that of cows who have just lifted their muzzles from a pond—cows who have been told to express Calm Courage, High Ideals. Every square inch of the canvas was painted as realistically as a photograph, and yet, it was obviously unfinished: it would be finished

when it resembled one of those German photographs, in which everything is incredibly sharp and dramatically three-dimensional, realler than real.

"What's it called?" Clinton said

"It's called New Horizons. Do you like it?" Clinton's mind swallowed the title, swished it around a little, and spat it up slightly changed. Earth Mother, Here We Go! he thought, giving it a last steady stare. He strolled, whistling softly as he might in some bright hospital, to the door.

"Goodby, Bernie," Clinton said.

Closing the door, he glanced back. On the wall, Kinsey listened as each devil told how it had done absolutely everything with every other devil, had always done so and would always continue to do so, world without end, so that all the case histories were exactly the same, and all the lines of all the columns of all the tables held the same number.

His apartment was dark; he did not bother calling out. He walked to the kitchen and found the note. one corner held down by a large unopened can of tomato juice, in the middle of the table. He read:

"I'm a conformist and a moral weakling and a coward. Everyone else has gone, and there seems to be provision for those of us who weren't cut out to be noble. I'm not strong enough, Clint; I can't fight everyone and myself and you, too. This way I'll just have to fight you. Or maybe I'm brave; we'll still be in love a month from now."

There was no salutation, and it was unsigned. A jar next to the can held a bouquet of brushes and pencils; he selected a grease pencil from it and wrote, on top of her note, I love you, in thick black letters. Then he drew a heart around it.

He opened a cabinet, took down a bottle of scotch and sloshed some in a glass. He lifted the glass to his lips, where the rim made an unexpected, musical trill against his teeth. He regarded his hand with considerable surprise. "Well, well," he said aloud, in tones of sprightly interest.

He emptied the glass in one long swallow, sloshed rather a lot more into it, and put the bottle away. Whistling softly, he strolled through the dark apartment to the bedroom. Bedrooms in which only men have slept smell of socks; bedrooms in which men and women have slept smell only of women. At least, to men. He lay down on his side of the bed, occasionally sipping at his drink, for quite a long time. He stared at the ceiling, and let his mind wander, as men under such circumstances are prone to do, back over the good times, the very good times. He closed his eyes . . .

. . . Janet came back, still in love with him, still loved; he told her, "You look older," which was a lie, because she looked younger, like a nineteen-year-old product of Dachau instead of a twentyfour-year-old product of Smith. . . . they were at somebody's place—when were they not at somebody's place?—and it was necessary that he stay by the TV set, to check up on a commercial. He sat near it, waiting for the station break, paying no attention to the party in the background. In midscene, the television set made a hideous, quite unconscionable noise; the screen broadcast scanning-patterns. Behind him there was a faint stir, a tension. The screen made a visual burp, and was occupied by a small man; not literally a small man, but a man you knew had a small soul. He had nasty glittering eyes and a pinched weak mouth, and every inch of him reeked of a perverted intimacy with, and knowledge of, power. The small man said, in a prim, defiant voice, ALL STAND. To the sound of scraping chairs behind him Clinton turned, to see Janet standing, all of them standing, blank-eyed and loosemouthed, standing waiting for the next order.

. . . Clinton opened his eyes; he had not been asleep. It had been a waking dream, differing from a daydream in that it needed no will's push to help its progress. It was familiar; he had had it many times.

Clinton sat up on the bed; if he were a clairvoyant, where, oh where, would he find an honest medium? Boy, what a director you'd make, he thought. Picking up his drink, he stood and then walked to the bedroom's french windows, opened them, and went out on the small terrace. He tilted his head and rocked back; above him to all sides were sheer cliffs, terraced escarpments, of thousands upon thousands of lighted windows. High above, the stars invisible because of the diffusion of light from the windows was the sky. Clinton thought of Noordberg, innocently lecherous and then pretending innocent lechery; in his mind he looked again at Bernie's picture, the two big children in front of their pastorale, and wondered what it was that lurked beneath, that must needs insist so loudly that it was not there.

He could not go to the Movie; he was the devil he knew. He took a small, civilized sip of his drink and, stretching out his arm delicately let the glass fall into the abyss beneath him. Always the one for the dramatic gesture he thought, carefully not saying it aloud lest it turn into a sob, and, looking up again, shook his futile fist viciously, not knowing if he did so at the windows, or at the sky.



SCIENCE











OH, EAST IS WEST AND WEST IS EAST—

by Isaac Asimov

ABOUT HALF A YEAR AGO, I BOUGHT MYSELF A SIXTEEN-INCH GLOBE on a nice wooden stand, with an electric light inside and a brass holder to keep it tipped at 23½ degrees. Now it stands in my attic study, to the left of my typewriter.

I use it as reference and as an objet d'art, but most often, I use it as a means of self-hypnosis. Faced with a nasty question as to just how to phrase some thought percolating through the softly-reverberating interior of my skull, I can stare at the globe and find escape in a delightful period of non-thought as I study the outlines of Cambodia.

Of course, as a side-effect, I am becoming more and more familiar with the shape of our planet's subdivisions, and I am beginning to fancy myself as a geography buff.

Consequently, you may imagine my chagrin when, faced with a simple geographic question in a recent issue of *Analog*, I came up with what I was told was a wrong answer. I have been fuming about it ever since.

Essentially, I was asked to name the American state which was farthest north, farthest south, farthest west and farthest east, and you yourself are welcome now (without looking at a map) to write down your own opinions on the matter.

Have you done it? All right, then, I will now go into the matter in detail and we'll-see if I can't figure out some way of having been right all along.

Of the four cardinal points of the compass, north and south offer no problems at all. The turning of the Earth on its axis makes it possible for two unique points to exist on the planet; the two points where the axis intersects the Earth's surface. These are, of course, the North Pole and

the South Pole. These can be defined in terms of latitude (see GHOST LINES IN THE SKY, May, 1964) as 90° N and 90° S respectively.

We can define north then as the direction you face when you face the North Pole and have your back to the South Pole. Similarly, south is the direction you face when you face the South Pole and have your back to the North Pole.

These are absolute directions, too. If point B is north of A, there is no way of so altering your point of view as to consider point B to be south of point A.

Let's take an actual case. The city of Omaha, Nebraska, is just about 1000 miles nearly due north of Houston, Texas. Therefore, we would expect that if a person in Houston took a plane and flew 1000 miles due north, he would end in Omaha.

Would our Houstonian, however, not also reach Omaha, eventually, if he flew south from Houston and continued flying in that direction without turning either left or right? And would not that mean that Omaha might be considered to be south of Houston.

The answer is no! Our traveller, flying south from Houston, would be facing the South Pole and after flying about 8,300 miles he would reach and pass over the South Pole. As soon as he had passed the South Pole, he would no longer be facing it. It would be at his back and he would be flying north. After flying north for 12,500 miles he would pass over the North Pole and promptly be flying south again. After traveling southward for 3,200 miles, he would reach Omaha.

All in all, he has travelled 12,500 miles north and 11,500 miles south. His net motion has been 1,000 miles north.

Therefore we need expect no confusion between north and south. We can answer such questions as: "Which is the most northerly state of the union?" without having to answer "Well, that depends—" We need only ascertain which state extends itself nearest the North Pole, and to determine that we can go by the parallels of latitude, which mark off the distance from the Equator to the North Pole in ninety roughly equal units called "degrees." (They are not quite equal because the Earth is not quite a sphere.)

One trick to the question of "which state" rests in the hope that the person being questioned will forget that the United States no longer consists of 48 states.

If the 48 states of "contiguous United States" are alone considered, then a hasty glance at the map may mislead you. In most drawings of the map of the United States, Maine, in the far northeast corner seems to be drawn so as to extend farther upward than Washington in the far northwest corner.

This is an illusion born of the fact that in most such maps, parallels of latitude are presented as curved lines, convex to the south. In a Mercator projection, in which the parallels are presented as perfectly straight and horizontal lines, you will have no trouble seeing that Maine falls short. Its most northerly point is only about 47.5° N, whereas the northwestern boundary of the United States is at 49.0° N.

If we concentrate on the northwest, then, and consider the Mercator straight line which marks off the boundary between the United States and Canada, we might be tempted to suppose there was no one most northerly state. Washington, Idaho, Montana, North Dakota and Minnesota seem to be in a five-way tie at the 49.0° mark.

This is not quite so, however, as you will find if you inspect the northern boundary of Minnesota closely. The 49° N boundary continues eastward for about 1/3 of the way across the state until it reaches Lake of the Woods. It then turns abruptly northward for about 30 miles, chopping off a small section of the shore, north of the lake, before returning south to a line of rivers and lakes that carries the boundary gently southeastward to Lake Superior.

The section north of the Lake of the Woods, about 124 square miles in area, is the northernmost portion of the 48 states, reaching about 49.4° N. The reason for the existence of this bite into what should clearly be Canadian territory, is the fact that in 1818, when that section of the boundary was established, maps were imperfect and the northern shore of the Lake of the Woods was thought to be south of the 49° N mark. By the time the matter was straightened out, the United States had established sovereignty in the little jag under question, and Great Britain decided to let the matter rest.

It turns out, then, that Minnesota is, of the 48 states, the farthest north. However, on January 3, 1959, Alaska was admitted into the Union as the 49th State and a number of statistics had to be overhauled at once. As we all know, Texas had to be demoted to second largest state, for Alaska, with an area of 571,065 square miles is 2.2 times as large as Texas. It is, indeed, nearly a fifth as large as all 48 states put together. (It is also larger than any Canadian province with the exception of Quebec. Quebec is 1.04 times as large as Alaska.)

In addition, Alaska carries off the palm as the nation's most northerly state. Every bit of it lies north of Minnesota's northernmost jag. Point Barrow, Alaska's northernmost point is about 71.3° N.

Thanks to Alaska, the United States is one of the Arctic nations, but it

is, nevertheless, far from being the most northerly. It is, in point of fact, only fifth most northerly.

The fourth most northerly nation is Norway. Norway itself does not reach quite as far north as Point Barrow, but about 500 miles north of that land is the island of Svalbard, better known to us as Spitzbergen. It is Norwegian territory and its northern tip reaches 80.8° N.

Third most northerly is the U.S.S.R. The northernmost point of Siberia (and of Asia, generally) is Cape Chelyuskin, which is roughly 77.5° N. Farther north still are a group of Soviet islands, collectively known as Severnaya Zemlya, which stretch north to about 81.3° N.

Second most northerly is Canada. Of Canada's continental territory, the Boothia peninsula stretches farthest north. Its northernmost point, at 71.4° N, is the northernmost point of North America. In the Arctic Ocean, north of Canada, lies a group of islands under Canadian sovereignty. Most northerly of these islands is one called Ellesmere Island. Its northernmost point, Cape Columbia, reaches 82.7° N.

That leaves the most northerly nation of all and you might have some fun asking someone for a quick answer to: "What nation is most northerly?" The answer is Denmark, which attains this distinction through its possession of Greenland. The most northerly point of Greenland, Cape Morris Jesup, reaches 83.7° N. It is the closest known land to the North Pole—which is only about 400 miles farther north.

Now let's try south. The 48 states stretch southward in two places; in Texas and in Florida. The southernmost point in Texas is just east of the city of Brownsville, 15 miles west of the mouth of the Rio Grande. There the state attains a latitude of 25.9° N.

Florida, however, does a trifle better. The southern tip of the Florida peninsula is at about 25.1° N. Running on a southwesterly line from southern Florida, moreover, are the Florida Keys, which curve down to a most southerly point at Key West, which is at 24.6° N. Florida is thus the most southerly of the 48 states.

Florida's distinction, like Minnesota's was removed with the admission of a new state. On August 21, 1959, Hawaii was admitted to the Union as the 50th State.

The most southerly of the Hawaiian islands is Hawaii itself. Its southernmost point, appropriately named "South Cape" is about 18.9° N, so that Hawaii is an easy winner for the title of most southerly state.

The fifty states of the Union, which spread over 52.6° of latitude from the Arctic Ocean to the tropical Pacific are nevertheless all in the Northern Hemisphere, so that the United States is nowhere in the running for the mark of the most southerly nation.

Of course, the most southerly land region of all is Antarctica, on which the South Pole itself is located. However, Antarctica can scarcely be counted, for barring some transient scientists and explorers its population is zero.

If we eliminate Antarctica and the various scrubby islands off its shores, we could ask ourselves, "What populated nation is farthest south?"

We might begin by considering the three continents that extend south of the equator.

Of these, Africa does least well. Its southernmost point, Cape Agulhas (part of the Union of South Africa) is at 34.8° S. This is no closer to the South Pole than Los Angeles is to the North Pole, yet it suffices to make the Union of South Africa the fifth closest nation to the South Pole.

Fourth closest is Australia. Its southernmost point, at Wilson's Promontory (southeast of Melbourne) is at 39.1° S. South of that point, however, is the Australian island of Tasmania, which reaches 43.6° S. This is about as close to the South Pole as Buffalo, N.Y. is to the North Pole.

New Zealand draws third place. It consists of two chief islands, North Island and South Island, and the southernmost point of the latter is at 46.6° S. In addition a small New Zealand island (Stewart Island) lies south of South Island and reaches 47.2° S, about as far south as Seattle, Washington is north.

It is South America, however, that is the most southerly of the inhabited continents. It's shape narrowing steadily, continues on for some 500 miles beyond the most southerly point reached by New Zealand. Argentina and Chile, battling it out for first and second place, march down that southward stretch side by side, to the strait of Magellan. Argentina stops short just before the strait, the entire shore of which is Chilean territory. The southernmost point of South America is therefore Chilean and is at 53.9° S.

To the southeast of the strait, however, is the island of Tierra del Fuego. Argentina skips over the strait and has in its possession part of that island. Indeed, the dividing line is north and south, with Argentina owning the eastern half and Chile the western. The southermost part of the island is Argentinian at 55.0° S., but there are a few islands south of Tierra del Fuego, which belong to Chile. The most southerly is Horn Island, on the south of which is Cape Horn, at about 56.0° S. Chile is therefore most southerly nation and Argentina second.

Cape Horn, the most southerly land (outside Antarctica and surrounding islands) is, indeed, only 650 miles or so north of the northernmost tip of the White Continent. Even so it is no closer to the South Pole than Moscow is to the north.

We come, next, to east and west. At first thought, this should give us no difficulty. The east-west line lies at right angles to the north-south line, and as you face north, east is at your right hand and west at your left. The existence of the North and South Poles thus completely defines east and west, as well as north and south. In fact, east was probably the first direction to be distinguished by early man, since it was the general direction of the rising sun, and during the long cold winter nights, eyes must have peered eagerly in that direction for the first sight of dawn.

But there is no unique most-easterly or most-westerly point. This introduces a certain confusion.

For instance, both Quito, Ecuador, and the mouth of the Amazon River are on the Equator. If you look at a map of South America, you will see that Quito is about 2100 miles due west of the mouth of the Amazon. If you were at the mouth of the Amazon and flew 2,100 miles due west, you would reach Quito.

Of course, you could leave the mouth of the Amazon in an easterly direction and by traveling at 22,900 miles reach Quito in that way, too.

This may look like our previous attempt to reach Omaha by travelling southward from Houston, but it isn't. In travelling southward from Houston, we changed our direction to northward when we crossed the South Pole, the unique most-southerly point. There is no unique most-easterly point, however, and in travelling east from the mouth of Amazon, we can reach Quito without ever going in any direction but east. In fact, you could keep circling the earth forever, traveling eastward at all times. And, of course, the same goes for traveling westward.

Let's put it another way— You can travel due north or due south for no more than 12,500 miles; but you can travel due east or due west for an infinite distance. This means that we can't play the game of finding a most easterly or a most westerly nation. Europe is east of North America, but Asia is east of Europe and North America is east of Asia—and so on forever.

Well, then, what can we do about this mess? Shall we say that Quito is 2,100 miles west of the mouth of the Amazon? Or 22,900 miles east?

Surely, any sane man would say, "Choose the direction that gives you the smaller number!"

It is not always easy to tell which direction gives the smaller number, however, for the full length of the east-west direction varies with latitude. At the equator, you will travel due east (or west) 25,000 miles before returning to your starting point. At the latitude of Minneapolis, Minnesota, you will travel only 17,500 miles and at the latitude of Oslo, Norway, only 12,500 miles.

It would make sense therefore to say something is 10,000 miles east of Quito, but not 10,000 miles east of Oslo. In the latter case you should more properly say it is 2,500 miles west of Oslo.

To avoid this sort of ambiguity, we can make use of degrees of longitude (see GHOST LINES IN THE SKY, again). The earth is sliced into longitudinal degrees as an orange is sliced into segments, and every eastwest journey covers exactly 360° in returning to the starting point. If, as one goes north (or south) from the equator, the total length of the eastwest journey decreases, so, in exactly matching fashion, does the length of the longitudinal degree.

If we measure distances east and west in degrees, then, we can choose the direction that will give us a figure of less than 180° and that will re-

move all ambiguity.

We are now ready to take up the question, "Which state of the Union is farthest east and which is farthest west?" To me, it seems that the clearest way to do this is to pick some point within the United States which we can travel east or west to the farthest limit of American territory without, in either case, traveling more than 180°.

If we consider only the 48 contiguous states, we can use as our reference meridian the one marked 100° W on our maps. That's a nice even number and the meridian cuts right through the middle of Nebraska be-

sides and that's close enough to the middle of the country.

As one sweeps the meridian line eastward, one reaches the Atlantic Ocean off the state of Georgia. Continue moving eastward, and state after state falls behind until only New England is left. And then, finally, only Maine is left.

The easternmost portion of Maine is at a city appropriately named Eastport, which lies 33.0° east of our reference meridian. Consequently, it seems fair to decide that of the 48 states, Maine is most easterly.

Now let's move westward. If it is your impression that California is the most westerly state of the 48, forget it. The most westerly portion of California is Cape Mendocino on its northern coast and it lies about 24.1° west of the reference meridian. Oregon does a little better, for Cape Blanco on its southern shore is 24.5° west of the reference meridian.

It is the state of Washington that holds the record, however, for Cape Flattery at the northwestern tip of the Olympic Peninsula, touches a point 24.8° west of the reference meridian.

Of the 48 states, then, Maine is easternmost and Washington westernmost.

What, though, if you add the 49th and 50th states, Alaska and Hawaii.

A quick glance at the map shows you that both new states lie to the west of the 48. Therefore, they leave Maine in undisputed possession of the eastern championship but must decide the western championship between themselves.

The main portion of Hawaii consists of eight separate islands of which the most westerly is Niihau, which reaches 60.2° west of the reference meridian.

However, Hawaii can do even better than this. West of the main island lie a string of small islands, shoals and reefs (the Leeward Islands) which reach out for nearly 1500 miles in a northwesterly direction. All of them are part of the state of Hawaii though they are virtually uninhabited, and serve mainly as the Hawaiian Islands Bird Reservation.

The westernmost of these is Kure Island (also called Ocean Island) which is somewhat smaller than Manhattan and which lies 78.5° west of the reference meridian.

And Alaska? Can that do better?

Alaska extends westward into four peninsulas, of which the second from the top, Seward Peninsula, reaches most westerly, and is the most westerly part, in fact, of North America. It ends in Cape Prince of Wales, which is 68.0° west of the reference meridian. This beats out the Hawaiian main islands, but not the Leeward Islands extension.

However, Alaska has an island chain of its own. Extending from the southernmost peninsula (Alaska Peninsula) are an arc of islands called the Aleutian Islands.

The Aleutians are unusual in that they extend Alaska farther to the south than most people would imagine. The southernmost Aleutian island is Amchitka, which is at a latitude of about 51.7° N, (just about the latitude of London). This means that there are parts of Alaska which are farther south than Berlin or Warsaw.

But it is the westerly reach that now concerns us. The islands stretch across 1200 miles of the Pacific and the most westerly of the group to form part of Alaska is the island of Attu. (It and the nearby island of Kiska, were occupied for a while by the Japanese during World War II, the only part of the fifty states to suffer this indignity—though to be sure, Alaska was not then a state.) Attu is 87.4° west of the reference meridian, and Alaska, then, is the most westerly state.

To summarize, then— In answering the question concerning the extreme states of the Union, I made some quick judgments in my mind and came up with:

	my answer	Analog answer
south	Hawaii	Hawaii
north	Alaska	Alask a
west	Alaska	Alaska 💮
east	Maine	Alaska
(And how did you do?)		

Why the discrepancy about the easternmost state? Well, I made use of a reference meridian that made it convenient to estimate east and west in the United States. To do the same for Europe I would have used a different reference meridian, for China still a different one and so on. This sort of thing was also done, more or less officially, by the various seagoing nations, until it was finally decided to establish a single reference meridian for the use of everyone (see GHOST LINES IN THE SKY, yet again).

This overall reference is the Prime Meridian, which passes through Greenwich Observatory in London. Everything west of that is marked off in degrees West Longitude; everything east in East Longitude. The two types of longitude meet at 180°, which is the meridian directly antipodal to the Prime Meridian.

We might possibly, then, define any point in East Longitude as east of any point in West Longitude. Of two objects, both in East Longitude, the one with the higher degree value is more easterly; of two objects, both in West Longitude, the one with the lower degree value is more easterly.

By this convention, an object is farthest east, if it passes beyond 179° E to touch 180° and farthest west if it passes beyond 179° W to touch 180°. At 180°, east is west and west is east and always the twain shall meet.

Naturally, the 180° line can introduce east-west confusion, but by a fortunate coincidence, it passes over nearly the minimum of land and the maximum of water (making possible a very convenient International Date Line which is not identical with the 180° meridian, by the way, though many, including Analog in its answers, confuse the two. But that's for another article someday.)

All the 48 states, fortunately are in West Longitude. The easternmost point of Maine is at 67° W and the westernmost point of Washington is at 124.8° W. Even Hawaii does not extend quite to the confusion of the 180° line, for Kure Island is at 178.5° W., just 1.5° short of the fatal mark.

But Alaska?

Well, the 180° line passes right through the Aleutian islands, leaving a stretch of about 300 miles of the islands beyond that crucial line and, therefore, in East Longitude. Attu, for instance is at 172.6° E. The island nearest the 180° line from the East Longitude side is Semisopochnoi Island (the Aleutians were once Russian territory, you know) which reaches à longitude of about 178.85° E.

Semisopochnoi Island has the highest value of East Longitude of any land area forming part of the fifty states and, by the east-west convention of the Prime Meridian, is therefore the most easterly portion of the fifty states. From this standpoint, Alaska is the most easterly state, as well as the most westerly and northerly.

However, I consider that a highly artificial and strained viewpoint. Imagine you are standing on Tanaga Island, an Aleutian island at roughly 179° W, and are being asked where Semisopochnoi Island is. Are you going to point and say, "Oh, about 100 miles west." Or are you going to point in the opposite direction and say, "Oh, about 13,900 miles east."

So I reject the east-west convention involving the Prime Meridian, which is based on the purely man-made accident of its placing, and upon the agreement to number from the Prime Meridian in both directions instead of in one direction only, sweeping all the way round to 360 degrees.

Having rejected that, I insist on insisting that Maine is the most easterly of the 50 states.

-With all due respect to the Gentle Readers of the great state of Alaska, of course.

Coming Next Month . . .

. . . is the first of two sequels to POUL ANDERSON'S MARQUE AND REPRISAL (Feb. 1965). If you've read the first, you'll be anxiously awaiting this one; if you haven't, no gnashing of teeth, please—ARSEN-AL PORT is a complete short novel, and may be enjoyed by all. And, to the countless writers of those demanding notes to Dr. Asimov asking for new fiction—we can finally say, let out your belts a notch. We do have a new short story by ISAAC ASIMOV, and it will appear in these pages next month.

When this story first appeared in our offices, Avram Davidson read it, scrawled "buy" on it, and remarked that it was good to see Bob Ottum (THE GIRLS ON CHANNEL N, April 1957) back again with a good, snappy, way-out story. Since then, we have discovered that we have discovered a new Bob Ottum (the Jr. on the byline had gone unnoticed). Bob Ottum Jr. is a 17-year-old high school senior, the winner of a national writing award, and the son of our earlier contributor. With all the confusion about identity, it's still the same good, snappy, way-out story.

ADO ABOUT NOTHING

by Bob Ottum Jr.

TODAY WE REACHED THE END of the universe. It was a big sign with red letters all lit up.

"THIS IS THE END OF THE UNIVERSE—DO NOT PRO-CEED BEYOND THIS POINT"

We pulled the ship in close and cut all the power. Frank hollered over the intercom:

"What in the hell is this?"

We didn't have any charts of the area. The reason we had come out this far was so that I could make some. No ship had ever been out this far before.

"Well, Frank, I... I guess it's the end of the universe. That's what the sign says."

"Dammit, there isn't any end to the universe! It just keeps on going! You know that as well as I do. If this is your idea of a joke . . ." "Ah, Frank, I didn't put the sign there. This is uncharted area, you know, and . . ."

"Well, give me a fix and we'll fly around the thing!"

"But Frank, it says . . . "

"I see what it says! Now give me a fix!"

"Yes sir. We're in section six, semisection nine, sector three, parallel eight, diagonal seven, subsector . . ."

"Johnny?"

"Yes?"

"Did you ever read that story about the guys who are out in a space ship, and they come to a wall?"

"No sir."

"Well, they try to get past the wall, and when they do, they die, because the wall is what separates

heaven from the rest of the universe."

"Oh."

"It looks solid, doesn't it?"

"Well, yeah, but that could just be an optical illusion."

"Do you think we ought to chance revving her up to full pow-

er and going ahead?"

"Well, I don't know sir. Maybe one of us better get out and have a close look at the thing. It could be just a cloud of dust particles that . . ."

"Can we pull in any closer?"

"Maybe. If it is solid, then it may have some gravity of its own. Then it would just pull us right smack into it."

"Are you a religious Johnny?"

"No . . . I, uh . . . well, how do you mean?"

"I mean like believing that this is the wall that separates heaven from the rest of the universe. Do

you think there is a heaven?" "I guess there's a heaven. But I

never thought . . ."

"We could even be dead right now. Like, you know, maybe we crashed into an astroid or something. Maybe we're dead, and now we've reached heaven."

"I don't feel like I'm dead. Wouldn't we have remembered it

if we had crashed?"

"Yeah, I guess so. One of us is going to have to go out there and have a look."

"I'll go, Frank."

"No you won't. The Space Administration needs men like you. I'll go."

"But Frank, what if . . ."

"Aw, come on! All this upset over nothing! Let's behave like a couple of men."

"OK. You're right. Can I help you put on your suit?"

"Yeah. Meet me in the pressure room."

Ours was one of the two-man jobs, used only for charting. One of us sat at either end. He flew, and I drew. The pressure room was right in the middle of the ship. I helped the captain put on his suit, and then went back to watch him on the television monitor.

"How is it out there, Frank?"

"I'm fine. I'm almost there. I think I can see the . . . the . . . well, I'll be damned!"

"Is something the matter? Frank?"

He was right up against the wall. It was solid all right. I could see him hunched over in one little spot.

"Johnny?" "Yes sir?"

"Have you got a quarter?"

"A . . . a what?"

"A quarter. Twenty-five cents." "Well, I don't know, sir. What

do you need a quarter for?"

"You find me one. I'm coming back for it."

There was some money in the ship. I don't know why, but for some reason, somebody had known to have some money on board. When the captain got back, I gave him the money.

"Why do you want a quarter,

Frank?"

"You'd better get one for yourself, too. And start getting your suit on. I'll be right back."

He took the quarter and left. And he came right back. But there was something wrong. His eyes were all glassy, and his mouth just hung loosely at the jaw. His eyebrows were turned up, and his forehead was all wrinkled.

"What is it, Frank? What's the

matter?"

"It was nothing. Really. It was nothing."

When I got about twenty feet away from the wall, I could see them. There were hundreds of them, plastered all over it. Old signs. There was an "Eat At Joe's," and a great big "Kilroy was here," and hearts with names in them. As I got closer, I could even see the hand scrawled four-letter words with crude drawings.

As I got right up against the wall, I noticed the little white square sign. It said,

"OBVIOUSLY YOU ARE NOT CONVINCED THAT THIS IS THE END OF THE UNIVERSE. IF YOU WILL PLACE A QUAR-TER IN THE SLOT BELOW. THE PEEP-HOLE WILL OPEN. AND YOU CAN SEE FOR YOURSELF."

And the captain was right. I paid my quarter and looked through the peep-hole. But it was nothing.

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Lin, Carter recently informed us that he "lives in a creaky old Charles Addams house in Queens with his wife Noel, a dog, a guinea pig, a baby skunk and two rabbits, squeezed in amid five thousand books." (Or did he say two books, squeezed in among five thousand rabbits?) No matter. What does matter is the good story below. It concerns the most prolific writer who ever—well, not lived exactly—and it is more than apt to please and surprise you.

UNCOLLECTED WORKS

by Lin Carter

STRANGE, THAT YOU SHOULD ask if I minded growing old. Actually, old age has much occupied my mind recently. Age, you see, my boy, has overtaken me by such imperceptible degrees that I was hardly conscious of its surreptitious advance. But, of late. I have had the matter brought to my attention by a certain shortness of breath and an increased and unsteady activity of my heart, whenever I am foolish enough—or forgetful enough—to climb stairs or to walk further along the cliffs than I have become accustomed to doing.

Age is a curious phenomenon, if I may call it that (for I would rather, for my peace of mind, rank it with the accidents than with the certainties of life). Its symptoms

in my case, save for certain minor physical annoyances, such as those I have just alluded to, are rather pleasantly limited to a lack ofwhat shall I call it?-excitability, perhaps? The burning issues of literature, which, in my more youthful years seemed so desperately important, can now scarcely rouse me to anything stronger than a vague displeasure, or, pleasure. I become more interested in the temperature of my afternoon tea, than in the current state of letters; more concerned with the health of my El-Martinique roses, than with the decline in elegance of form . . . subjects which once aroused within me a degree of fervor and evangelical zeal I am now mildly embarrassed to recollect.

The life of a literary critic (or,

as I much preferred to entitle my 'calling', an apostle of letters) does, after all, seldom demand violent physical activity or emotional exertion. Therefore I am hardly made aware of any lessening of my bodily capabilities. As for life, itself . . . you know, young man, when I look back on my little handful of years, I find it oddly difficult to disentangle the strands of my personal life from the texture of my professional career! Does that disturb you? But it is true: I cannot be sure, for example, which disturbed me more in recent years, the death of my third wife, or the lamentable stupidity of the distinguished members of the Swedish Academy of Literature not to award the Nobel to the great Ezra Pound before death (he always said he would outlive me by at least long enough to compose a savage epitaph for my memorial-stone; I attacked too fiercely, I regret, his last volume of canzoni). And I find myself, when looking back, dating the events of my inner emotional life with the events of my career . . . "When did I meet Par Lagerkvist?" I will ask myself. "Ah, yes, that summer Barbara and I rented the villa near Capri!" Or: "Now where was I when Roger was born?" "Oh, of course, correcting

(Does all this seem inhumane to the young? Well, perhaps it is. Who was it—Bertrand Russell?—

proofs on my Filigree!"

who once observed that "books make a damned poor substitute for living." I fear I am the living proof of that coined adage . . . although I always rejoined, "yes, but life is damned empty without books.")

I beg your pardon? Ah-you read Filigree. Well, it was an amazing little trifle, and beguiled me all one summer. It is a distinct pleasure to see young journalists like yourself actually reading some of the writers they make up features about! It is a joy to me to learn that the young people still remember me, for you might say it is my greatest regret in life that I was not gifted by the Gods to be a creator of literature myself, but one of that lesser breed who merely comments, in print, on their reading. I am, therefore, flattered that you came all the way out here to gather "copy" on an old writeron-writers. I am surprised, in fact, that your magazine (I am sorry that I am not familiar with it, but we get so few, so very few, American magazines over here) should be at all interested in a passé gentleman of letters, to send you so far for an interview. I hope, I do hope, that you will not ask for my comment on Mr. Kerouac and his work, or why I refused to attend Mr. Graves' testimonial dinner that summer in Paris . . .

Eh? Is that my chief regret? Oh, probably not. I lack the, shall I say, stamina, for creative work. It demands a certain physical durability to be a writer of the prime rank, like Tom Wolfe writing in long-hand on the top of his icebox for 46 hours, or Hemingway living on gin and black coffee for ten hours at a stretch. Pounding a typewriter is hard work, young man, I assure you! Ditch-digging, by comparison, demands far less of one, or so I have been told.

What is my greatest regret? Ah, what an interesting question! You might say, I chiefly regret never having met Yeats. Or that I am most sorry to have published that savagely satirical critique of Joyce's Portrait of the Artist as a Young Man, when it was being serialized in The Egoist in 1913 (or thereabouts). But—no, that would be telling you what you expect to hear, and it would be begging the question.

Shall I be very cryptic, young stranger? Very well. I most regret that I shall not live to read the supreme monument of American fiction, Willard Paxton's Those Who Err. It shall not be printed until some forty years after I die (if the local physicians are correct in their estimates of my current state of wellbeing). Or, that I shall never experience the merciless wit of those glittering comedies that shall earn for the as yet unborn Juan Ramon Chiminez his immortality as "the Argentine Shakespeare" . . . or those intoxicating sonnets, the Adorations, that Claude de Montaubon will publish seventy-six years from now. What else could you expect an aging critic to regret most, but those masterpieces of the future not yet written, whose authors are yet unborn?

Bear with me, young man. And you need not look at me so . . . my wits are intact although my body is somewhat the worse for wear. I know you could never dare publish what I am going to tell you, but as I have never related this to a living soul, let a talkative and lonely old man unburden himself, here in the shadow of his summer roses . . .

I never knew his name. To me, these many, many years, he has been simply: The Gentleman in Green. He has always been an enigma to me. Sometimes I wonder if I ever met him at all, in reality, or if his tall figure slipped from a waking dream. Perhaps he was a phantom of the mind, dreamed in a doze over a cool glass of good Chateau Medoc on a soft and wistful autumn afternoon . . .

Do you know Paris? Ah, if you know Paris at all, you must know the Left Bank. There is a little, cobble-paved side-street off the Place d'Opera, going up the hill towards the old Cathedral of St. Stephan's. Seventy years ago there was a tiny, and very dirty, bistro on that crooked street that winds and meanders and zig-zags its dilapidated way under the shadow

of Bernette's belltower, once the talk of the continent, with its corbelled arches and baroque, sexless angels, pigeons roosting on their blown, frozen bronze tresses. Nearby is the attic studio where Nerval lived once, and down the hill towards the Opera, that stucco apartment building whose concierge, if asked with a coin, could wheeze out some quaint reminiscences of d'Auberville and the poets of the Paladins, who used to gather there on rainy, Proustian afternoons and utter manifestos designed to resuscitate literature.

I had only been in Paris a month or less. The unexpected success of my first (and only) slim volume of verse, Mandragore, had gone to my head. Still lacking of twenty, I fled the bourgeois, stifling atmosphere of America, hoping to find in the City of Light those ideal regions in whose pure, stimulating atmosphere perfect verse could be composed, and among whose aloof, Olympian salons I would take my brilliant place. Ah—to be young, and an artist, and living in Paris in those dim days! It was Valhalla and El Dorado combined, where Heine died and Proust drowsed. There was an industrious young Degas in every garrett, and a few wilted Rimbauds still ornamented the more picturesque gutters scrawled "Dieu est morte!" in pastel chalk on the alley-walls.

I had spent a fatiguing day.

Two editors had I visited, in fear and trembling but sans result, and had talked poetry with a bearded Russian expatriate who looked like an unclipped goat and who vehemently believed the future of "modern" poetry lay in imitating Pushkin in vers libre.

I stopped on my way back to

my flat at the little bistro for a cool glass and a warm bun. It was crowded with the afternoon troop of sight-seers from the Cathedral, so I shared a corner table with an elderly gentleman of scholarly, even professorial, appearance. He was neatly, but cheaply dressed, slim and going grey over the temples, in an old suit of bottle-green with lapels whose pointed width became passé a full generation ago, and a loose foulard at his throat, half-hidden beneath sharp little spike-like goatee, also grev. As is universal with two strangers sharing a table or a seat, we ignored each other save for covert, side-wise glances. He sat back, watching the crowd, a pernod before him from which he rarely sipped. When he reached for the glass, I noted his hands: stained with grease, which savored of the inventor, while his long hair and the genteel decay of his accoutrements suggested, rather. the artist. His face was in shadow, but the profile, with the jutting goatee and patriarchal, hawkbeaked nose, reminded me inescapably of Cardinal Giambatiste in the Louvre's collection of El Greco. I drew out a copy of my book (which, I fear, I carried with me everywhere and pointedly took out and read in public) and began leafing through it.

The garcon took my order, and my companion finished his drink. Somehow or other we struck up a conversation. I was very proud of my aristocratic French (as I fancied it) and delighted to display linguistic accomplishment, scorning as mere touriste the American who spoke English in Paris. He elicited from me my profession, and casually exercised a remarkable literary knowledge which excited my interest. I overrode his polite protest, and bought second pernod—I was drinking Medoc, priding myself on the taste of a born connoisseur -and listened as he held forth.

"As you may have noticed from my hands, young sir, I am a technician. A mechanic, if you will. I am fortunate enough to possess a few patents, obtained idly in my youth, and these bring a sufficient income for me to live as I please and perform my experiments as I will. There is no name, as yet coined, for my speciality... I have christened it Bibliochanics for my own amusement.

"When I was a young student in Prague—that would be long before you were born, my young friend—I read widely and, I fear, indiscriminately. I recall an image, or metaphor, in one of the philosophers that so intrigued the young intellectual I was then, that it became a profound and motivating force in selecting my career. Perhaps you recall it: the notion that if you put fifty million monkeys to work, scribbling aimlessly (for this was long before the typewriter was invented) they would eventually produce, letter-perfect, the complete works of Montaigne?"

I nodded, absently—in my day, it had been "Shakespeare," but I let him go on without comment, curious as to where all this was leading, even as you doubtlessly are. He adjusted a monocle, took a sip of pernod, and continued:

"I was pessessed by that perse

"I was possessed by that paradox. The verb is precise: it was as if a demon had entered me. I was fascinated and enchanted by the idea. Later, in my courses in mathematics and symbolic logic at the University, I was electrified to discover that even so quaint and bizarre a concept, was, after all, quite within the realms of possibility. After all, the number of possible letter-combinations within any alphabet is quite finite, you know. Of course, the project, as originally envisioned by the philosopher (was in St. Goudet?) would consume fifty thousand years. But, still, it was possible.

"And so I became an experimental mechanical engineer. And a very successful one, if I may be so immodest as to be truthful. Dur-

ing the years that followed, busy ones, and crowded with events, I remained under the valence of demonic possession. that length, financially independent, thanks to my inventions, I began toying with the idea. Again, the verb is precise, for I played with the notion as an idle amusement. to beguile my leisure. Most inventors of my youth had a perpetualmotion machine hidden away in the cellar, or a fantastic aerofoil of some eccentric and da Vincian design. My hobby was the writingmachine.

"After some years of idle tinkering, I conceived of a unique device—and a leisurely hobby gave birth to an absorbing, full-time pursuit. My mechanism was not unlike the modern typewriter, but perfected far beyond that crude device. It did not use letters fixed to the ends of rods, but wheels of raised letters, which revolved at random, creating a patternless meaninglessness—a chaos of "chance" combinations of letters. The main problem, since I did not have fifty thousand years at my disposal, was to accelerate the printed combinations. My experiments consumed many years, and devoured my youth as well. My invention went through a hundred models, a hundred improvements, and rapidly ate into my small stipend. I was lucky enough, purely as by-products to my main research, to patent several valua-

ble modifications on the linotype and on the typewriter, itself, providing me the wherewithall to continue my work. Rather early in my attempts to increase the speed of the combinations, I eliminated actual letters, replacing them with spools of paper tape punched with a coded system of dots and dashes. Next, I devised a phonetic system composed of sounds, not letters . . . I shall not bore you by recounting the many years it took before I was ready to—begin. But at length my machine (which I called Bibliac, for only a maniac would attempt a device that could write all the books in the world) was ready. It operated at perfect random, and "wrote" at a speed impossible to achieve by hand-hundreds, even thousands of times faster than the typewriter. I had increased the speed by reducing the size of the paper spools and the coded wheels that punched through them . . . ah, I shall not try to explain, but, in short, I had the mechanical equivalent of the fifty million monkevs."

"And did they produce Montaigne?" I asked, rather lightly, I fear, for the Gentleman in Green fixed me with a serious glance.

"No, they did not. For many months, Bibliac produced undiluted gibberish, at the rate of millions of 'words' a day."

"Surely you did not read —"

"No. I had devised a monitor that spot-scanned the tapes and was keyed to register any significant combination of phonemes, any that would seem to display a logical pattern. After two full years, during which Bibliac continue to operate without a pause. such a combination was noted. I translated the tape, but could make no sense out of it at all. Utter Babel, yet, undeniably, certain 'words' reappeared in the text over and over. One cannot devote a sizable portion of one's life to a certain project and then give up. I determined to secure the advice of an old friend from the University, who had made his home in Paris even as I. He identified the text without delay—why had I never thought to consult a linguist.

"Why, of course,' Markoy said when I showed him my translation. You have here an early passage of Enmerkar and the Lord of Aratta, the ancient Babylonian epic. And in the original Sumerian, too. It is, you must be aware, widely considered the most ancient known work in any literature."

"From then on, I dwelt in Paradise, tasting such delights as only he can savor, who sees the dream of a lifetime coming true before him. During the next years, Bibliac progressed through the Sumerian, the Babylonian, the Assyrian and finally, the Egyptian literatures. Ere long it began on Homer, and from that point on, its course was a predictable one."

"Can it be—you mean—?"

The Gentleman in Green nodded, with a faint smile. "Of course, no one had ever bothered to work out the logical implications of the fifty-million-monkeys paradox. It would not begin with Montaigne, but with the very beginnings of written literature! Thence forward, it would trace the development of letters through time in orderly sequence. For, you see, there existed a living equivalent of the fifty-million-monkeys—the human race, itself."

I stared at him, staggered, not knowing whether he was mad or merely entertaining me with an amusing fable, but completely lost in his tale. He continued:

"I watched my invention reproduce the entire literature of the Greeks (including, I must note, the fourteen lost comedies of Aristotle which perished with the Alexandrian Library, the long-vanished Marsyas of Homer, and the many lost works of Hesiod, Pindar, Sappho, and the Cyclic poets). By winter Bibliac had entered upon the Romans. Ah, what an unending delight. I was watching the complete vindication of all my dreams—the fulfillment of my life's work!"

I ordered the glasses filled, and as the long grey shadows of afternoon mingled with the plum-purple of evening, he talked on.

"The next years were somewhat less interesting, for they merely

repeated the triumph endlessly, with the literature of the Middle Ages, the Reformation, and so on into modern times. There is no point in listing these modern works, for you are already familiar with many of them."

I nodded, secretly wondering if Bibliac had reproduced my own book of verse? "Now that Bibliac is silent," I said, going along with his fantastic tale, "you must be ready to publish an account of your experimental work in the technical journals, and reap your well-deserved harvest of fame—?"

His reply was not at all what I had expected. He fixed me with a quick glance.

"Finished? But it is not—the experiment goes on."

"But how can it go on, when it has reached . . ."

"The only direction is—forward," he said cooly. My shock must have been visibly traced on my features, for he leaned forward and tapped the marble tabletop with his forefinger.

"Last week I read the works that shall enrich the next century. Bibliac is printing the unwritten words of the future."

"That is—impossible—surely?" I said weakly.

He cut through my fumblings with a short, decisive gesture.

"Listen to me, young man. I have read the productions of genius that shall astonish the world long after you and I are dust. That

gigantic novel, Those Who Err, which Willard Paxton, the greatest of the American novelists, will die before completing, even as did the great Cervantes, before finishing the Quixote to which it shall be compared. I have read the Arthuriad of Gwyn Rhys Jones, a Welshman, and the greatest epic poet since Milton. And I have explored the intricate music of the cyclic-dramas of Von Bremen . . . and the rich dream-imagery of Taliesin in Limbo, for which the English King, Charles IV, will knight Edward Quinsey Marlinson. I, alone of all men, recall the subtle music of the opening couplet of Tierney's mock-romance, Baghdad . . . 'Sindbad am I, sailor of Ocean,/Sailor of all of the Orient Seas' . . . ah, yes, my fine young poet, you who do not even believe what I am saying is the truth . . . at this hour, Bibliac is puzzling its tireless way through poems and tales in Neo-Anglic, a language which has not yet evolyed from present-day English . . . Bibliac will run forever, tireless as any automaton, filling its endless spools of paper tape with the triumphs of the thirtieth, and the fortieth and even the fiftieth centuries . . . 'to the last syllable of recorded time' . . ."

You are looking, young man, with very much the same expression I must have worn, when the Gentleman in Green uttered those words. He must have been irritated by my vapid stare, my idiotic comments, my not-very-well-concealed air of ironic tolerance of what may, after all, have merely been a madman, and not a genius who has rifled through the treasure vaults of Tomorrow.

What? Oh, he sprang up from the table and darted angrily into the street—and was struck down by a bicyclist. His fine brow struck the curbstone, splattering it with crimson...ah, why should I bother recalling it yet again!

Hmm? Dead? Perhaps—the crowd gathered swiftly, the gendarmes . . . I was shaken to the core of my spirit and hesitated—fatally hesitated—then he was gone, taken away in an ambulance, and my one and only chance—gone with him. His name, his address—I never knew. Whether he lived or died—forever unknown.

But he has plagued me forever since. Was he just a clever cadger-of-drinks, who repaid the generous with a fine-spun romance? Was he just a cafe hanger-on, seeking the ear of the well-pursed, gullible tourist? Was he insane—deluded—a dreamer—an eccentric would-be inventor, seeking funds for some wild invention that would never see the light of day?

Perhaps my first theory is the soundest of all. Surely you, a journalist, must have listened to many surprising revelations over a free glass of liquor? I recall a grizzled Irishman for whom I bought a glass of beer once, in McSorley's in New York. He confided to me that he had sold his soul to Asmodeus for eternal youth . . . but unfortunately had neglected to realize it meant eternal poverty, since no amount of money could support a man who never dies.

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And the Italian count I met on the Riviera—twenty years ago, as I recall-who sponged a full week off a wealthy art-collector, by his claim to be a genuine werewolf . . . he left our mutual host before the full moon, and I have always rather regretted it. Alcohol will frequently bring out, even in the most common man,—the unexpected.

No, no, of course you cannot publish this. Just write that I regret Pound died before being given the Nobel . . . or that I regret having never met Yeats. Or say that I deplore the formlessness of contemporary letters. Or anything vou will. It does not matter.

. . . But, if you will, remember those names. Paxton. Chiminez. De Montaubon Iones Von Brethe Gentleman in Green. You may live to see Those Who Err . . . Ah, Great God, I envy you. You will know whether it was the truth or not . . . no, no, you must forgive me, tears come easy to the old . . .

Yes, the river does look lovely from here. You should see it in June, with the willows dipping their thin green fingers in the shallows, and the rich curve of the cliffs beyond. On clear days, you can actually . . .

Ah, that will be my housekeeper, and I expect it is time for your train. Thank you so much for stopping by. And—please—you must forgive an old man for rambling on like this. There are so few hereabouts with whom I can talk. Yes, yes, certainly. Just say I salute the memory of Pound, and regret

men. Sir Edward Marlinson. Tierney. You are very young, scarce older than I, when I met	you like. Anything.
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Its author writes that this story "was written in my spare time in Niamey on the Niger River, a day's jeep ride from Timbuctu." We should perhaps explain that Mr. Schutz works for the State Department and is presently serving as American Consul General in Tangier, Morocco. After reading this fresh and convincing view of an unusual trip through space, we're sure you will join us in hoping that Mr. Schutz finds more spare time, whether in Niamey or elsewhere, to write more like it.

MAIDEN VOYAGE

by J. W. Schutz

White Sands, July 4, 2037.

DEAR DEE,

I'm absolutely furious! When I got the telegram to report here "within 48 hours" I almost panicked, thinking of the thousands of things I simply must do before leaving. I had visions of dashing up in the taxicopter and just hurling my things on board bare instants before the take-off. And when I checked in, actually breathlessly mind you, the Reception-frump blandly told me that the Ares wouldn't take off for twenty-two days! I could have eaten glass. I told the woman that I certainly didn't need to sit around for three weeks to make a travel connection no matter how awe-inspiring they might think it was. After all, I said, it wasn't as though I was John

Glenn back in the twentieth century—things had shaken down a bit since then. And then I asked her, with all the frost at my command, when was the latest, the positively latest, I really must be on hand. She smiled one of those infuriating clerical smiles and said, "I'm afraid today is, Miss Hackaberry. You have much less time than you think!" and handed me a dictionary-sized bundle of forms.

If anything had looked at all frantic I might have cooled off a little. But there were quite a lot of people coming and going, all looking as relaxed as wet Kleenex, and I really fulminated. I asked to see someone in authority and she reluctantly buzzed a Mr. Bowen, "in charge of passenger embarkations". (Nice eyes and a sort of genialworried look.) He gave a sort of ex-

planation. Things about medical examinations, weightlessness, injections, and so on, that really sounded rather impressive, so I let myself be persuaded not to go right back to Orlando. When they offered me a room at the Center, though, I'm afraid I was rather rude, so here I am in a sort of crude hotel in White Sands with my absolutely Spartan baggage, simmering down a little before going down to supper. I suppose there'll be nothing amusing in town to do, and I don't know a soul here, so I'll have a look at those loathsome forms afterwards and get to sleep early.

Drop me a line soon. Lord knows there'll be time enough.

Your sizzling sister, Thelma

White Sands, July 12, 2037.

DEAR DEE,

How wrong can a gal be? I think I told you in my last letter over a week ago now that I'd get some early sleep and attend to forms and the like later? Well, as it turned out, in the hotel's bar I met Sid Mills from Winter Park and went out on the town with him.

The next morning, the fifth, I awoke feeling a sort of greyish brown, and of course without having filled out any forms. I got to the Center an hour late and found I was one of a group of five who hadn't waited for me. I had to scribble the forms at a hundred words a

minute with Miss Reception-desk breathing rather nastily on my neck. Then before I caught my breath I was put through a physical examination. Lord, I didn't know one person could have so much physique and in so many different places! I ran up and down ladders, did nip-ups, bled on command, and all the usual things, and a great many not so usual ones. I stripped and redressed I don't know how many times and suffered indignities I wouldn't tell about to Mother.

About two o'clock I had caught up with the others. We had a diet lunch with no choice except "eat it or don't eat it" and I got to know the other four in my group. None of them I would really be mad about. One boy, John Carter, who isn't too bad and who is intriguingly distant with me, that's all. He's tall and a little too thin but with good shoulders and nice eyes. I gather that he has done some rather interesting things in plant pathology, which is my line of course. The others are two nondescript girls and a middle-aged PHD with a short beard in two tones of grey.

After the lunch there was a lecture in a small auditorium with the other six groups of five people. The whole ship's passenger list is just 35 people—most of them young and about half of them men, which isn't too bad for a start. You know, I like men. Father's quite wrong about that. It's just that I'm in absolutely no hurry to marry and "set-

tle down". Lord, how I dislike that phrase.

I won't bore you with the details of the lecture, a lot of which were about what to do in weightlessness and which is not normally of much use to a girl. It went on for about four hours and I was getting a headache and thinking of a hot bath, supper and a good night's rest. When they dismissed us we all crowded into the hall and suddenly—just like that—they dropped us down an elevator shaft!

What had happened was that they had dropped the floor of the hall under us about thirty feet. It was all beautifully controlled and no one was hurt, of course, but we all ended up in a tangle on the floor and I found myself adhering like a coat of tan to John Carter. About half the crowd thought it was funny and the other half was furious. I was one of the furious ones. They then told us that slow-motion pictures had been taken and that we'd be shown them and discuss weightlessness the next day.

The next few days were even more hectic. The pictures were rather amusing, incidentally, and I was complimented on the speed of my reactions. I had to give up my room at the hotel and move into the Center on the third day, when a series of injections made me deathly ill. The Center assigned a nurse to sit with me for a night or two.

In short, I've learned in these last eight days that space travel is a

serious matter and to be taken accordingly. I've been through so much that I can hardly imagine how they'll fill up the next two weeks—but I suspect they will all right. I'm going to sign off now and get some sleep. Tomorrow there's a course on how to take a bath in a plastic envelope without drowning. I'll write you at least once or twice before I leave.

You might let me know how my pupils are doing in your competent hands.

Love to the gang in the faculty room, Thelma

> The Center, July 15

DEAR DEE,

The day after I wrote you last we had some fittings for "personal equipment" which I will not describe. Actually I would never have thought about that particular detail, but when you think about it (which I have been obliged to do!) a trip to the powder room under weightless conditions with the standard fixtures would be a bit-untidy shall we say. Enough about that. But the bit about taking a bath in a plastic sack turned out to be quite amusing. For the same obreasons you can't simply climb into a tub in a space cabin and splash and scrub, and of course you can't go for months in a hermetically closed atmosphere without baths.

white plastic as flexible and as pleasant to touch as a chamois-skin. They look like duffle bags with several short tubes sticking out here and there, and with two loose, longsleeved rubber gloves welded into them near the neck. For our fittings and practical demonstrations we were all given a sort of nvlon suit "for modesty" although they aren't awfully modest in my opinion. The session was co-ed, moreover. Incidentally, John Carter, the slightly distant plant pathologist I mentioned, isn't as thin as I had thought. Rather nicely muscled, in fact, without being knotty, if you know what I mean. He caught me giving him a little more than a casual glance and began to blush, and when I realized the way the male mind was operating, I started to blush. So there we were, blushing at each other when the idiot instructor said. "Of course we won't wear these suits when we really take baths!" We were taught how to wiggle into the things and then to seal them around our necks. Once sealed inside you use the rubber gloves to turn on water faucets in

Our bathtubs are individually

fitted affairs of heavy, translucent

We were taught how to wiggle into the things and then to seal them around our necks. Once sealed inside you use the rubber gloves to turn on water faucets in the outside tubes, slip your hands out of the gloves and use the wash-cloth which is floating around inside. It involves a certain amount of contortionism but it's not too bad, really. We were cautioned not to put too much water into the

suits as it collects at the bottom of the sack, assumes a pear shape, and becomes terribly heavy. Of course you don't have that problem in space and you can use as much water as you like. One of the women in the crowd did put too much water in her "tub" and as she was pear-shaped herself to begin with, the whole affair quickly became unmanageable and she tumbled over like a kewpie doll at a fair stall. The water went right on filling up the sack and she was rolling around on the floor in it looking like a haunted pumpkin until someone pulled the zipper at her neck and practically flooded the classroom. She started to giggle and there we were, all standing around in practically nothing but bread wrappers, laughing our silly heads off with her.

Then we were shown a movie short of how it was actually done in space—which was graceful and rather weird, with a starlet model floating about in mid-air wearing, I believe, either less than we had been, or perhaps a flesh-colored affair. The men in the crowd appeared to enjoy it thoroughly and I caught Carter giving me a sort of "comparative" look.

We've since had instructions in all sorts of improbable things. Eating and drinking, for example, and how to keep a cabin neat when everything floats around at the slightest breath of air or movement. Then, yesterday, we had an actual experience with weightlessness.

They took us up in high altitude planes and flew us in parabolic paths so that we were actually without weight for thirty or forty seconds at a time. The first time or two I felt like I was falling down a well and just hung on until my nails turned blue. After that I got a little used to it and floated around in the air pretending I was a bird. We all got a little adventurous in fact and when the plane came out of the last parabola a bit abruptly we all wound up in a tangled heap near the front of the cabin.

One of the women in the group —I don't know who she is as she isn't in our regular team of five banged her upper lip a little and it started to bleed. John Carter, hastened to give her medical attention with a clean handkerchief and a lot of unnecessary little pats. The woman is probably loads older than he is but she's the dark, busty type that men like. Quite attractive, I suppose, in a flashy sort of way. When he'd got her tidied up she squeezed his arm and gave him one of those confidential smiles. After the flight he went off with her still stuck to his arm and I haven't seen much of him since.

Dee, remember I told you in my last letter about one of my teammates, an older man with a little two-toned beard? I've been seeing quite a bit of him. His name's Pavloff and he's another plant pathologist. The passenger list

seems to be loaded with us. He's been on some wonderful expeditions that I would have worn a grey beard myself to have gone on. I'm having supper with him tonight.

Tomorrow, instead of weightlessness, we will have a session in the centrifuge to see how many "g's" we can stand. I'm a bit terrified of that so I think I'll let Pavloff tuck me in rather early. Just think, it's only eleven more days until take-off and we have just thousands of things still to do.

Hug your nice husband for me and tell Aunt Vannie there is absolutely nothing to worry about.

Love,

Thelma

July 22 (Ye Gods!)

Dear Dee,

Only six more days to D-Day! The pace is stepped up quite a bit and I haven't had time to think, much less write, for the last week. I'm getting a little nervous too, which isn't like me. I think it was the centrifuge that did it. Or maybe it was the parachute jump.

The day after my date with Dr. Pavloff we were all herded into a building about five miles from the Center that I had never seen before. It looks very much like a bullring from the outside. Inside it's more like the bowels of an ocean liner with a lot of enormous, slow-moving machinery that looks utterly inexorable. Which it is.

They lined us up like kids after recess and then, without a word of warning or explanation, herded us into a series of little cabins all around the circumference of the building. The cabins were rather like dentist's chairs enclosed in steel and glass phone booths. Before I had time to ask questions a young blonde technician as handsome as a ski instructor, but lots less personal, had strapped me into the chair, attached electrodes to various places—practically stripping me in the process—adjusted a television scanner to point at my face, gave me a little spring thing on the end of a light cord, said "Squeeze that like grim death!" and stepped out, clanging a tomb-like metal door behind him.

The next thing I knew there was a humming noise and the whole cabin began to move sidewise, very smoothly. Then things began to happen that I hope I'll never have to go through again. My dentist's chair smashed me in the back, my head snapped back and was glued to the headrest. Suddenly my veins were full of icecold lead and I was breathing air the consistency of warm asphalt. I felt as if I were being slowly stepped on by something impossibly huge. Then I caught sight of myself reflected in a steel panel. My face was slipping down around my ears and neck, there were big, gaping, red pouches under my eves like wounds, I had three chins, my teeth were showing clear back to my ears and my chest had reverted to what it was when I was eight. I tried to scream and couldn't. Things began to turn red, then violet, and finally black. The next thing I knew my blonde technician was leaning over me grinning and waving a tube of ammonia under my nose.

It seems the point of this whole exercise was to see if any of us would let go of the little spring gadgets (by passing out) before the centrifuge hit eight "g's", which is the critical value. If anyone had, there was little likelihood that he, or she, would make the trip. As it happened, no one did.

trip. As it happened, no one did.

Preparation for the parachute jump was a lot more elaborate. We were given some preliminary training, lectures, films and so forth, and were told that this was an elimination affair. We were all to wear little hearing-aid type radios and when we jumped a voice would count to twenty-five, at which moment we were to pull our rip-cords, Anyone who pulled before twenty-five or after twenty-seven would remain earthbound.

When the time came to make

When the time came to make the jump we were taken up in planes with special seats arranged to dump us out simultaneously. We were not told when the trap would be sprung, and that was the worst part. It seemed to me as though that flight lasted a hundred years and that I held my breath

the whole time. Naturally when the moment of truth arrived it caught me completely unprepared and I dropped out of the plane screaming so loudly that I missed the first three number of the count altogether. After that it got worse. By the time the voice reached fifteen I wanted to scream again and didn't dare. By twenty I was sure I had already hit the ground and was dead, and would be falling through space for the rest of eternity. I could have sworn solemnly that ten minutes elapsed between "twenty" and "twenty-one" and my hair had time to turn slowly grey between 'twenty-four" and "twenty-five".

Landing was an anti-climax, though I did twist my ankle a little. I remembered to spill the wind out of my 'chute on the ground and got out of my harness without trouble and actually swaggered up to the pick-up that came racing out to get us. Feeling too cocky, I asked the medic in the pick-up why we had had to do all that when we had already been through the weightlessness bit. He said in a bored voice, "You might have to crash-land on Mars, you know." I got the shakes and had to have a sedative. At that, I came through it fairly well. Two of the men had pulled their rip-cords before the count got to twenty, and one of the women did everything perfectly but when she got back to the Center quietly packed her bags and took the next plane home to Denver. That leaves thirty-two of us who will be passengers and the Center is vastly relieved because there was room for only thirty-three passengers at the maximum.

Something that has given me almost as much trouble as the centrifuge and the parachute jump combined is the fact that I can't take most of the stuff I had brought with me. And I thought I had reduced things to impossible limits. Special clothing is provided for Mars. They're like a cross between an Eskimo parka and a space suit, and use up almost all of the weight allowance. Skirts are out of the question either for Mars or during the trip (weightlessness again). Sweaters are unnecessary in the ship which has a constant temperature which is too warm for them. It all boils down to two Marsuits. three abbreviated nylon jumpers in a choice of four colors, two pairs of plastic sandals, and a couple of those tank suits we use to take baths in. And that's all. No style, no variety, even the men wear exactly the same stuff. If, after all I have been through, this drab wardrobe doesn't make me give up, I guess nothing will.

Well, that's about all I have time for now. I'll write or wire at least once more before the Day. Incidentally, the dark, arm-squeezing type is named Mrs. Collow and she's taking *quite* an interest in Dr. Pavloff. Believe me, your Thelma and the Collow are going to have a little "understanding" before much longer.

Hastily, of course,

Thelma

July 24, 2037

Dear Dee,

The day after tomorrow is IT. I don't have time to give you much news but there are several things I'd like you to do for me and a couple of things I want to explain.

First of all, I have shipped you my suitcases with nearly every stitch in them that I had when I left home. Please put the nighties, stockings, and underthings away for me somewhere. I can probably use those when (and if) I get back. The same for the sweaters, but all of the dresses should be disposed of. The very soonest I could return would be four years, as you know, and by that time they will be simply antique. It's a shame to lose so much money, so if some of the girls want to pick up some hand-me-down bargains (the stuff is nearly all new, after all) you can sell them for what you can get and turn the proceeds over to Aunt Vannie. The green chiffon evening dress I bought at Neiman Marcus you can give to Agnes. It should suit her very well with her pink hair. If there is anything you want, help yourself.

Now about my books. In the bookcase in the living room there is a shelf and a half of reference

works on biology, plant pathology, statistical analysis and so on. They are hard to get hold of even in New York and on Mars will be worth their weight in caviar. I never dreamed I could "take them with me" but in a way I can. What you do is this. Take the enclosed signed form and the books to Major Reddiger at Building "C". 320, at Cape Kennedy Center. He'll microfilm Space them, transfer the films to magnetic tape, and transmit the tape by ruby laser to the librarian at Mars Station One. The librarian checks his files and those titles he doesn't have he reproduces in full on microfilm again. Incidentally, Major Reddiger will drop you a card when the job is done and you can stop by when you're over on the coast and pick the books up again. I know this is a chore but you understand that it's rather important and I'm sure you won't mind doing it.

Tape-and-laser will be our means of communication. In fact, it's the way Father sent his letter for me to join him on Mars. I'll use voice tapes which you can play back on your own tape recorder. You can reply in the same way. They transfer ordinary tapes to special ones that zip through the machines at an unbelievable rate. An hour of ordinary tape can be, and is, transmitted in fifteen seconds. The only drawback is that a message—any message—costs a

minimum of \$25. For that much you get up to twenty-five seconds of laser time so I suppose it is worth it if you have a lot to say. Of course, delivery is rather irregular since they only send private messages when the circuits aren't jampacked with scientific data and official communications, and that means you sometimes have to wait a week before your tape gets transmitted in the few seconds it requires. In any case, our "post office" will be Major Reddiger's office.

One more thing and then I must sign off. Please explain to Aunt Vannie that since we won't be in the Van Allen belts for more than a few minutes, or an hour at the most, and since the ship is quite adequately shielded, there is absolutely no chance that I will be sterilized en route! What a thing to worry about! Also tell her that if anyone does develop an unsuspected intolerance to weightlessness during the trip there is an injection which can be given which makes one insensible to it. (The trouble is that the patient has to be fed, bathed, and everything as if he were in a coma. This is so completely inconvenient that it is done only as a last resort. You needn't tell Aunt Vannie that, however.)

There. That's all. I'll send you at least one or two tapes during the voyage, and you'll both hear from me when I've had a chance to find out how Father is.

Goodbye, Sis. I'll admit I'm a little scared.

Love,

Thelma

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Miss Thelma Hackaberry White Sands, New Mexico

Kennedy Space Center, Cape Kennedy, Florida, August 27, 2037.

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Yours very truly, Alfred A. Reddiger, Maj. USAF

Hello! Dee?

Where do these notes begin? Oh, yes.

Listen, Dee. If this sounds a little unnatural, it's because I'm reading it into the recorder. They gave us each a sort of lightweight erasable diary when we got on board. It's the only way you can keep your thoughts in order long enough to get everything down on tape. Anyway, here goes. I'll leave out the dates unless a date is important for some reason.

You saw the take-off. I can tell you we were awfully cold in those little nylon jumpers and felt pretty silly in front of the cameras.

The pre-takeoff procedure seemed endless in one way and in

another it went like lightning. In spite of the long wait, strapped in my bunk in a sort of spacesuit-cum-corset, I wasn't really ready when the speaker said . . . three, two, one RRRoar!"

Nothing much happened at first, and I had time to think. "It'll explode right here on the pad. I wonder if I'll have time to get out of here?" Then I began to feel a pressure like when you start a car fast. Only it didn't ease up. It just got harder and harder. It was the centrifuge all over again but this time it seemed a million times worse. The noise, for one thing, frightening. And I didn't know when the acceleration would stop. I got to thinking it would go on getting worse until I was squashed like a bug. There was a lot of vibration too. I thought sure something—everything—was going wrong. I could feel my chest flattening and my chin was hanging down and pressing on my windpipe, cutting off what little breath I had left. My bosoms were trying to run down the side of my ribs and it hurt terribly in spite of the pressure suit. I tried to scream, and did manage a little squeak. but then I blacked out.

I came to with a whiff of old-fashioned smelling salts and looked up to see a young Air Force lieutenant apparently falling on me head-first.

I must have jumped or something because the next thing I knew the lieutenant and I were tangled together like an old hairnet and bouncing-hard-from one wall to the other of my tiny cabin. We hit the walls about four times before Lieutenant Pegler (that's his name) could stop us. The air was full of droplets of smelling salts and I was practically strangling and so dizzy I could hardly see. And then, dammit, I started to bawl. Lt. Pegler held me in his arms until I calmed down. Then he strapped me down lightly with the harness while he cleaned up the cabin. At first I didn't dare wiggle for fear of starting everything all over again, but when I began to relax it was like floating on a cloud and watching a very military angel swimming around in the air. Dreamy. So much so that I fell asleep—from exhaustion, I guess.

When I woke up again it was easier. I just opened my eyes slowly and there I was. My eyes and my face muscles and my breasts were a little sore but I felt pretty good. After you get used to sleeping in weightlessness it's heavenly.

One of the first things I noticed when I began really noticing things was the silence. It's not absolutely silent on a spaceship, of course. That would drive you mad. You hear little clicks, clanks, humming noises, snatches of voices, and a slight sighing from the air circulation system. But everything is muffled and seems very far away

and there's a consciousness that it's all self-contained. You're millions of miles from automobiles, birds, insects, even air. It's spooky at first, but you get to like that too. Everyone talks softly on a spaceship.

I had expected to be black and blue after bumping into all the furniture with Lt. Pegler. I was astonished not to be until I noticed that almost everything—partitions, cabinets, washing equipment, etc. -is made of thin sheets of foam rubber. Really thin. It looks terribly flimsy until you realize it doesn't have to support any weight. Not any. The floors and some of the frames of things-my bunk for example—are solid, of course, but well padded. Until you get your "space legs" you bump pretty hard against nearly everything.

The first day out was over so quickly it didn't seeem long, but when I look back at all the things I did, it must have been long enough. After the first few hours we all began to explore the ship. It isn't very big, of course, but it's amazingly easy to get lost without an "up" or "down". Sometimes I still get turned around.

The ship's a long cylinder, essentially. The "rear" or the part that left the earth last, takes up about two-fifths of the length and most of that is fuel tanks, engines, and so on. Passengers aren't allowed in that section. Then come the passengers' cabins. They are

arranged around a central service shaft in groups of six. When the ship is standing vertically there are six "floors" with six cabins on each floor. This makes a sort of tower within the outer cylinder of the ship's hull. All the cabin doors open out into the space between this tower and the hull. The tower is braced to the hull with girders and before take-off you get to your cabins by climbing aluminum ladders from girder to girder. It seems terribly high then. Just before takeoff the ladders are all folded against the hull and clamped down. They stay that way all during the trip. There are thirty-two passengers and three officers in the cabins. One of the cabins is vacant.

Above, or forward of, the passenger cabins there is a whole floor of open space which we use for a lounge, dining salon, and movies. It's the only place in the passengers' part of the ship that has portholes—six very small ones. Most of the time all but one or two of them are covered. I thought this was pretty stingy at first, but after a few days of stars, it's enough. You can't look toward the sun, of course, and the earth was only visible for the first day while we were in parking orbit.

We call this space The Bullpen, and it gets terribly crowded. It looks weird when it is because no one is at any particular angle to the walls or bulkheads, or to each other. It's a sort of game of PeopleJackstraws. At meals and for movies they string up thick nylon cords in parallel lines which we all cling to. We stick out in all directions from these cords and look like strings of animated barbed wire. At first you get pains in the neck from trying to look in all directions. It takes quite a bit of getting used to.

After the first day I began getting acquainted. In two days I knew all the passengers pretty well. John Carter, the young plant pathologist I told you about, has an engaging smile and nice, short, crisp, black hair that isn't always floating around. (One man had just a few strands of hair combed sideways in long strings to cover his scalp. On the ship that simply didn't work. The strands were always floating around, so he shaved all the hair off and looks loads better.) About John Carter, though, He has a very neat, compact way of moving, and gets about in No-Gee like a bird. Rather sensibly. too, he seems to have lost interest in that chesty Mrs. Collow who got the split lip. She (Mrs. Collow) spends most of her time with Dr. Pavloff, who's more nearly her age.

There's a Miss Pincknie in the crowd who's a panic. She over-flows in all directions. I've nothing against fat girls, and this one is nice; but in space . . . really! The trouble is our more-than-limited wardrobe. Little nylon playsuits with no bras. (Incidentally, a bra

in No-Gee simply squeezes one into odd shapes so no one wears one. And without weight, who needs support? In space, every woman's a Hollywood pigeon!) Well, even on Daytona Beach, rompers can be sort of distressing on some women. But on Pincknie! You have to see her to believe her. If she had the muscular plumpness of some farm girls it wouldn't be too bad. But Pincknie slept in her foundation back in Peoria—and for cause. In No-Gee, she's a phenomenon. Every time she moves, or smiles, even-and good Heaven, when she chuckles—little waves of flesh start to roll and ripple, going from one end of her to the other and again doing astonishing things on the way. Some of the men can't look at her and some of the others can't stop.

She's quite good natured about it, however. She even uses it to tease Lt. Pegler. He's a dear, but likes to give the impression that he's an absolutely imperturbable military Jeeves. Well, Pincknie catches his eye once in a while when she thinks he's been pompous and just twitches a muscle somewhere—any muscle—starting one of those self-perpetuating kootch routines, and poor Pegler turns violet with embarrassment.

The crowd are pretty average University people. There are biologists, chemists, physicists, and even one paleontologist. One girl rather intrigues me. She's an ento-

mologist, a quite young, fraillooking girl with enormous eyes, as shy as she can be. The odd thing about her is that, although she passed all tests with flying colors, she just cannot get used to weightlessness. She is the only one on the ship who never lets go of the safety lines. When the rest of us are floating about like a school of airv minnows, she just creeps along the walls, not saying anything and giving a sweet, shy smile when anyone teases her about it. It gives you a funny feeling, seeing her hanging on one of the cords or going hand-over-hand on those clamped-down ladders, that she alone weighs something. Everyone is fond of her, though. Her name is Caroline Roberts.

After the first week we settled into a routine that became rather dull. Weird perhaps, but dull. Nobody stares any more when they see a table of bridge without the table and no chairs. (They just clip the cards to a pillowcase to keep them from floating off.) Conversation groups looked strange at first, with four or five people holding hands in a circle like a children's game. Now they don't look odd at all. You know that if you don't hold someone's hand when you're talking to him you'll soon be at some wacky angle to him.

I guess it was the business of adjusting that kept me from paying too much attention to what people were saying. After awhile, though, I began to notice that Dr. Pavloff got curiously intense when he was talking about the Venus Spore, which he did a lot, and that Mrs. Collow always seemed to be drinking in every word he said.

You probably remember the Venus Spore affair? It was about ten years ago. There was quite a lot of talk about it. The second Venus expedition had brought it back on the boot of a spacesuit, and it propagated violently. scared the devil out of the Plant Quarantine Service people until they got it under control. They had the whole State of New Mexico isolated from the rest of the country for a while. For a long time afterwards there were wild stories. One of the most persistent ones was to the effect that some biologist in the Department of Agriculture lab had isolated the spore and had hidden a sample somewhere while he threatened the world with it. For years it was a favorite bar-room rumor that the F.B.I. were still looking for him. Being a plant pathologist, I was interested in the spore, but was never able to get much information on it. I've even met some other people in the field who claim that there never was such a thing as the Venus Spore. That the whole thing was a hoax, in fact.

Well, if you can believe Dr. Pavloff, there really was a Venus Spore and it could have become the worst disaster the world has

ever known. He claims it might even have made nuclear war seem trivial, and that the Spore is the real reason that further expeditions and colonization attempts on Venus were abandoned. According to him, the Spore approached photosynthesis from the opposite direction to that taken by normal plant life. That is, instead of absorbing carbon dioxide and liberating oxygen, it absorbs oxygen and liberates CO2 as animals do. (Sounds ugly to me right there, somehow.) The worst of the affair, he maintains, is that the spore, developed in an atmosphere with almost no oxygen and very little direct sunlight, "lost its head," as he puts it, on the earth, where both are abundant, and began propagating explosively. He claims that Agriculture used its entire appropriation to fight the spore literally cremating thousands of square miles of the State of New Mexico with flame-throwers, and that the money was extremely well-spent. Without that, he says, the spore would, within a decade, have used up the earth's oxygen nearly completely and would have asphyxiated the entire population of the globe.

At this point it gets too wild for me. But La Collow drinks it all in and begs for more. She has him eating out of her hand, but it's disgusting, I think. Especially when he begins to criticize the Government, suggesting that they might have isolated colonies of the spore and "tamed" it to perform useful jobs. Like the production of commercial CO₂, dry ice, and even control of the weather by judicious management of the "greenhouse effect."

"Do you really think so, Pavel?" she says, with a voice you could top a sundae with.

I see by the indicator on this machine that I'm coming to the end of the tape.

Just a bit more. There's to be a dance in the Bullpen tomorrow. "Tomorrow" is a mere figure of speech of course. Our days are regulated by dimming the lights for eight hours out of twenty-four. But the dance is quite real.

They plan to string a sort of checkerboard of nylon cords in the Bullpen after supper and play recordings of Wiggy Wiggin's Dance Band, which is pretty wild stuff. The crew say they do it every trip and it's fun. Can you picture what The Scat would be like without the limitations usually imposed by gravity? (Pun-sort of.) Lt. Pegler and Lt. Poggs have even worked up a skit which is said to be absolutely gravy! I'm looking forward to it, as my date is John Carter. I've seen quite a lot of him during this last month, now that Collow is stalking Dr. Pavloff.

Don't go getting ideas, though. I'm a long way from Daddy's beloved "settling down" yet. He's nice, of course, in a shy-masculine sort of way, and a girl could do

worse. Better cut this bit out of the tape with your manicure scissors before Aunt Vannie hears it or she'll be selecting names for children.

There's the last absolute inch of tape!

Dee, could you . . . Damn! CLICK.

Kennedy Space Center, Cape Kennedy, Florida, December 20, 2037. Mrs. Delia H. Thomas,

1442 Calla Circle, Orlando, Florida.

Dear Mrs. Thomas:

I am enclosing your sister's second tape from the IPSS Ares. I'm sorry to say that it has been necessary to delay re-transmission to you for what were, at the time, security reasons. I hasten to say that you will no doubt have other tapes, but from Mars itself.

About the security matter I need not explain since Miss Hackaberry has given a rather complete, although unofficial, account in her tape. Also, I will not repeat the standard information such a letter usually contains about speed, volume, since, after your visit to the Center with your husband I am aware that it is superfluous.

Thank you and Mr. Thomas for your kind words concerning my recent promotion, and let me add that both Mrs. Reddiger and I are as relieved as you are that your sister has arrived safely.

The next time you and your husband are over here I hope you will have time to have supper with Mrs. Reddiger and me before returning to Orlando.

Sincerely yours, Alfred A. Reddiger, Lt. Col., USAF

Dee?

A helluva lot has happened since my last tape. I hardly know where to begin and of course I didn't take notes. I don't have too much time, either. There's tape enough, naturally, but we'll be preparing to land in a few hours, and there's quite a few things . . .

Now wait. Let me start this over calmly and logically. There!

I think I told you in my last tape that we were going to have a dance, and I'll begin there.

We did have the dance, and it was lots of fun. Lt. Pegler and Lt. Poggs were a riot. They dressed in very clever Russian ballet costumes, made out of tissue paper mostly, which floated about them ridiculously. Pegler was in a Cossack costume, and Poggs wore a long ballet skirt over one of those tank suits—padded in the obvious places—and they did their whole skit in slow-motion in mid-air to a heavy Russian opera theme. At one point, where Poggs was floating slowly out of his partner's reach overhead (yes, they even managed to give an illusion of "up" and "down") in a gracefully silly attitude, I laughed so hard my side started to hurt and tears came out of my eyes and floated away. John Carter caught one of my tears and gravely put it in his pocket. I guess that's the moment I felt the most like settling down. A man with an imagination like that . . . well, honestly!

It was at the dance that I noticed for the first time that Pavloff wore a gold slave bracelet. I remember thinking that it looked oddly effeminate and out of place on him. Well, I'll tell you more about that later.

After the skit, Lieutenants Pegler and Poggs showed us how ballroom dancing is possible in No-Gee. The squares of cord are about three meters across and are sort of springy. What you do is bounce against them at an angle and go from corner to corner of the square in a sort of billiard-table bank shot. You do this as a couple, either holding hands or with your arms around each other and once you get the rhythm of the thing you can leave each other, turn, bank in opposite directions and come together again, and so on. When the tempo speeds up you can go from side to side of your square instead of corner to corner. There is only one couple to each square and as long as you stick to simple cornering in slow rhythm it's quite sedate. But when you get a little adventurous there's no way to put on the brakes once you've left the cord too fast so that sometimes it

gets a little rough—especially if you hit the cord behind you at the same time as the couple in the next square. The Scat turns out to be quite impossible and, for that matter, so are most of the usual "steps". With Wiggy Wiggins at his graviest, and the squares mostly full, it looks a little like old films of twentieth century "Jittering".

It was during one of these wilder sessions that I noticed the Pavloff bracelet business.

You remember I told you—last tape—about Caroline Roberts? She's the mousey, but appealing little girl who creeps along the lines instead of floating free like everyone else. Of course there was no question of getting her to dance, although several of the boys tried. But she was watching, clinging to a nylon cord inside an empty square on the edge of the Bullpen, and getting fun out of it.

Well, there she was not holding on as tightly as usual, which shows how much she was forgetting her fear. Then, all at once, the couple in the square in front of her hit the cord particularly hard, the shock gave a bounce to the cord she was holding, and she sailed across her square letting out little moaning gasps of terror. Just as she came to the other side, clutching frantically with her hands, Dr. Pavloff put his hand on the cord in front of her (he was not with the Collow for once) and she grabbed his wrist—the one with the bracelet. Dee, you never saw such an expression of fury. He simply ripped her hand away, and gave her a really rough shove so that she sailed back across her square. She left the Bullpen at once, handover-hand, as fast as she could go. She was crying.

Of course I followed her to her cabin to see if there was anything I could do, but she shook her head at me—even with a brave little smile.

Pavloff's meanness took quite a lot of the fun out of our dance for me so, although the affair lasted another hour or so, I said goodnight to Johnny and went to my cabin early.

Well, just as I was closing my door I heard a little noise out in the "Space" (you can't call it a corridor, really) and I glanced out just in time to see Collow coming furtively out of Dr. Pavloff's cabin! She didn't see me.

Just as on cruise ships in the Caribbean, there's a lot of this sort of thing on spaceships, apparently. More perhaps than on earth because the trips are longer. So I just shrugged and went to bed. It wasn't until I had put the light out that I remembered that after Caroline had grabbed him Pavloff had stopped dancing, leaving his partner just hanging in mid-air, while he examined that bracelet with a funny look on his face.

I don't know why, but for the next few days I kept an eye on that bracelet and noticed that Dr. P. couldn't keep his fingers off it and looked faintly concerned if he brushed that wrist against anything. I also noticed that he turned it on his wrist almost constantly whenever anyone talked to him on his favorite subject—the Venus Spore. It got to be such a "thing" with me that I finally mentioned it to Johnny.

He didn't take it very seriously and said that middle-aged men often got little mannerisms, and I guessed he was right and dismissed the whole business. Although I couldn't get over the way he had shoved Caroline.

We were all just exhausted for several days after the dance because we literally hadn't exercised a single muscle for nearly two months. I was not only languid, but sore in every bone, and I'm sure nearly everyone else was too.

One of the consequences was that our usual soft-spoken, quietly floating daily life became almost completely silent and inactive. Shipboard romances bloomed, partly because it was easier to float with an arm around your waist than to make the effort to avoid it. Conversation began to be carried on mostly in whispers.

The consequence of that was that too often I arrived someplace just in time to see something I didn't need to. It was fun at times. I even caught Lt. Pegler, of all people, stimulating the famous

Pincknie ripples with a well-placed pat. Pincknie saw me at the same time and giggled, which started a ripple from the opposite direction, with results that left me helpless with laughter.

There was one incident that I didn't find nearly so funny, however. During one of the dim-out periods that pass for night on board I couldn't get to sleep, and since day and night clothes are identical, pushed out of my cabin to make a quick spiral tour of the space between cabins and hull. It's a mild exercise, like taking an evening walk before going to bed. There wasn't a soul around, and for no reason at all I just poked my head into the Bullpen which was almost dark. Not more than my head, because there were two people there, off to one side. I would have ducked out instantly, except at just that moment I recognized John Carter's voice—just a word, quickly hushed.

I'm not the eavesdropping sort, but I admit I froze like a stalking cat. He was with the Collow woman. They were talking in very low voices and I couldn't hear what they were saying, and it could have been innocent. But just when I was deciding to give Johnny, at least, the benefit of the doubt, she put both arms around him, gave him a quick, familiar sort of kiss and pushed off in my direction with one little chuckle of absolutely disgusting satisfaction.

Not wanting to be caught where I was, I made a mad—even dangerous—dive for my cabin, and made it inside before she came through the bulkhead.

There was no question of sleep. I was seething. I caricatured to myself every word that woman had said in my presence and every detail of the clothes she wore, remembered all the repulsive people I had ever known who looked in any way like her, and in general made a most uncharacteristic idiot of myself. In the midst of it all I decided that if that was the way Mr. John Carter wanted it. wasn't going to speak to him for the rest of the trip. Or ever! Then I started to cry, and that's messy in space, which made it more irritating than ever.

For days afterwards I tried to ignore them both, which was impossible because the ship's too small. Then I began frankly spying on them, being as icy as I knew how with Mr. Carter, but keeping as close to them as I could. I had to admit that they didn't seem to pay too much attention to each other, and I never found them intimately together again. After a very little while he began following me about, trying to find out why I was giving him the cold shoulder.

That left me with no one to spy on but Collow. I guess I was becoming pretty detestable myself, but I couldn't help it. Most of the men on the ship liked her, and Lt. Poggs follower her around like a puppy when he wasn't on duty. I discovered, to my surprise, that she was quite popular even with some of the women. And of course her conversations with Dr. Pavloff never flagged. He droned on and on about photosynthesis and his Venus Spore, and fingered his silly bracelet.

Noticing Collow so much, I began to notice the very slightest things she did and one of those things was to look at that bracelet every time Pavloff touched it, and then look away quickly. I thought, "If she thinks that thing is effeminate, why doesn't she simply leave him alone?"

You'll forgive me if I dwell on that bracelet when you know how important it turned out to be. It was, after all, just one of those identity chains with heavy links and a flat metal section slightly curved to the wrist that people have been wearing for a hundred years. Pavloff's was rather massive, and of gold. The only thing remarkable about it was Pavloff's constant fingering it, and the Collow's interest. I was near them once when she asked him if she might try it on, and he told her, with that voice change and hesitance which shows so clearly when men are lying, that the catch was caught and that he couldn't get it over his fist, and that, in fact, he hadn't taken it off in many years. And then I noticed something that I might not have if I hadn't been watching her so closely. Her face took on a flicker of that expression which means, "I've got you, Buster!" and then she apparently accepted the story and dropped the subject. But not before I'd seen that unholy gleam of satisfaction.

After a week I could speak civilly to Mrs. Collow and Mr. Carter, but I was cool to them and cultivated other friends. But there was something nagging at the back of my mind—a feeling that I was being a fool—and that something was wrong, somehow. I didn't like to admit it, but I just wasn't enjoying the trip or the experience any more, and I even found myself wondering why I'd ever allowed Daddy to "talk me into it".

And then the terrible thing happened.

The only way I can give you any idea of how terrible it was is to say that for a while there was talk of our never landing again. Anywhere! Just circle until our air ran out and we died. And that wouldn't have been long either.

Everyone was involved in the start of it. Pincknie, and Collow, and John Carter, and Pavloff, and even poor little Caroline Roberts. This is the way it happened.

The buzzer had just sounded for lunch and quite a few of us came out of our cabins at once, headed for the Bullpen. Caroline was already creeping into the Bullpen in her slow, clinging way, and was half-way through the hatch. Dr. Pavloff was just behind her, and I was next, floating a little too fast, and I thought I'd probably bump into him from behind. And just then, out of the corner of my eve, I saw Mrs. Collow to one side of me and John Carter on the other, both going too fast, as though, like me, they had miscalculated their push-off. I remember thinking, "They are both too deft, somehow, for this really to happen, but we're all going to pile up in the hatch." Which we did. Violently.

Caroline was torn loose from her grip and gave a little shiek and grabbed Dr. Pavloff's jumper. John crashed into me and we caromed into Dr. Pavloff just as Mrs. Collow hit us from the other side. We flew into the Bullpen in a ball of arms and legs and brought up against one of the nylons, which everyone grabbed. Caroline started to cry again and this time Dr. Pavloff had the grace to apologize, and was actually patting her on the shoulder when he noticed that his precious bracelet was missing. It was the only time I have ever really seen anyone turn white. Pavloff looked like a ghost. He had both feet and one hand on the cord and he was looking straight at Mrs. Collow. His voice was absurdly high and yet terribly, frightfully, controlled as he said to her, "What have you done with that bracelet?"

John said, "What bracelet?" and Pavloff glanced at him for a second and was starting to explain.

I looked at Mrs. Collow, and there, against her breast, it's outline showing quite plainly through her jumper, was the bracelet. And just at this moment she said, "You've simply dropped it."

For an instant Dr. Pavloff's eyes searched in all directions, and then the same thing occurred to him that did to me. You can't "drop" anything in "no-gee"!

What happened next was terrible—and at the same time seemed so silly—over a trinket.

Pavloff let go of the cord and with his legs against it, hurled himself straight at Mrs. Collow. There was something flashing in his hand. Johnny shouted.

"Sis! Look OUT!"

Then Pavloff hit her, the thing in his hand swung downward, ripping her jumper and leaving her naked to the hips with a line of bright blood from one breast to her navel, and the gold bracelet went buzzing past my head to strike the only solid thing in the Bullpen — the bulkhead — and shatter into glittering pieces.

Johnny hurled himself like a lance at Pavloff, his right arm extended in front of him. I heard a nasty sound and saw Dr. Pavloff's cheek split wide open under his eye, and then the air was full

of little floating rubies of blood, and Mrs. Collow was shouting in an amazingly authoritative voice.

"John! Never *mind* that. The spore here!" and she ripped off what was left of her jumper, soaked it with one of the squeezebottles set out for lunch and tossed it to him.

He turned quickly toward the bulkhead and there, where the bracelet had shattered, was a grevish, powderly cloud about as big as a pillowcase, turning rosy around the edges. I stared stupidly as John approached it, cautiously, as though it were a wild animal. Mrs. Collow, nude and with a diagonal stripe of blood across her front like a diplomatic ribbon, was literally holding her breath, and I was thinking several things at once; first, that even nude she didn't look like a siren at all, next that something terrible was going on that I didn't understand, and last, an underlying joy in my mind that kept repeating, "Sis. Look out, Sis. Sis. SIS."

At about the moment I had realized that these two were brother and sister, and that my recent actions had been idiotic, I saw Johnny, his face tense, spreading the damp, ruined jumper in the air and moving it around as much of the cloud as it would cover. It seemed to squirm away from him, the edges bulging here and there, turning a deeper red and balooning out like smoke from an oil-fire.

Out of the corner of my eye I saw Dr. Pavloff's limp body floating slowly across the Bullpen, trailing a chain of blood drops from his cut cheek, and Lt. Pegler arrowing across the free space toward us. As he arrived John had closed the wet garment into a sort of sack and pressed it into Pegler's hands.

"Lieutenant," he said, "Put this in the reactor chamber—at once."

The lieutenant started to argue. Mrs. Collow said, "That's an order!"

The Lieutenant gulped just once, took the soggy bundle and headed toward the hatch.

The motion had spread the cloud and I watched in fascination as Mrs. Collow stripped the nylon suit off poor Caroline Roberts' back while she clung helplessly to her rope. Then I realized the urgency and, stripping off my own jumper, went to help.

We tried to stem, mop up, soak out of the air, these pink billows of living smoke. But it was hopeless, and when a ventilator opening scooped in a tendril of it, Mrs. Collow gave a moan and we both hung motionless in the air, each holding a soggy pink mess of rags in our hands. It was then that I realized that the entire ship's company was in the Bullpen staring round-eyed at three naked and apparently mad women. I left my jumper where it was and fled to my cabin.

Dee, that was the beginning of the most terrible days I shall ever remember.

I can't tell you every detail—no one could. I know some of the things that were done to rid us of the Venus Spore, and I can guess others. I do know the effects on myself because after the first day I kept a kind of castaway's diary. Here, I'll read you some of the entries.

0900. Everyone on the Ares knows about the Spore. Most of them don't know the danger of it yet. They've stopped the ventilation system to keep it from spreading and are taking all of the ducts apart. You can't stay still in one position long without beginning to pant from the CO2 in your own breath. It's like trying to breath in a paper bag. Nearly everyone fans his or her face with something -a handkerchief, a sheet of notepaper. They've locked Dr. Pavloff in his cabin. You can hear him yammering and screaming constantly. He's quite mad. Some of the men talk of strangling him to shut him up.

1100. The crew have sealed off the Bullpen and are doing something in there. You can smell rubber, or something burning. Shows there must still be air moving in the ventilator ducts. Everyone is marveling at Alice Collow being an FBI agent. Me most of all. No one stays in his cabin although the cylinder between hull and cabins is

terribly crowded with everybody moving about in it at once. The Captain has just spoken to us on the public address system. They are trying to burn away the colonies of spore that are clinging to things. The smell is foam padding burning. We are asked not to move more than we can help, so as not to use too much oxygen. That's the real danger of this stuff-it uses more oxygen than five shiploads of passengers would. And it loads the air with carbon dioxide which. naturally, doesn't sink "down" anywhere. The air is full of it. It's not dangerous yet, but how soon will it become so? And burning the spore takes more oxygen—and produces more carbon dioxide. There's no way to restore the oxygen balance. Or is there? People are making all sorts of theories, wild rumors are starting almost one a minute, but they become so absurd that they can't result in panic yet. Left to spread, the Venus Spore could deprive an entire planet of its breathable air. In fact, on Venus, it has already done so. It might have done so again on earth if it hadn't been ruthlessly wiped out?

1800. Lieutenants Pegler and Poggs are handing out rations. No one had noticed that there hadn't been any lunch. I couldn't eat my supper at first. Then, to dispose of it, I ate it out of a sense of duty.

2100. We have all been in constant motion all day to escape our own exhalation of breath, and I am exhausted. The thought of sleep frightens me but they have dimmed the lights and I find myself dozing and waking, dozing and waking. Caroline Roberts has succumbed to space sickness and is vomiting uncontrollably. She just clings to her bunk, filling the air with globules of the contents of her stomach. It's horrible.

2230. Caroline has had to have the KO injection. She was beginning to throw up the lining of her stomach. Alice Collow, Pincknie, and I are taking turns fanning her and keeping her clean. She can open and close her eyes and breath—and that's all. Poor little thing.

—and that's all. Poor little thing. Second day. 0900. Most of us slept a little. I have passed a frightful night. I awoke a dozen times after having been still too long. The sensation is like being strangled with a pillow. You wake with a jar, fling yourself away from where you have been floating, and you pant as though you had run up a steep flight of stairs. Breakfast is late.

1130. We have all had a little something to eat—nothing hot, and water the only liquid. The air smells horrible. Soon there will be nothing to burn in the torches. They are trying to find other means of killing the spore. It dies in carbon tetrachloride, but the fumes of that are dangerous so they can only use it in places that don't have to be occupied. They've

had to shut off even the slight vacuum for the toilet fixtures. As soon as they told us they were going to, everyone began to be uncomfortable.

1400. Some of the women have begun to have hysterics. Because of the vacuum fixtures. They finally ran an emergency line to one cabin—mine. I thought I'd explode myself before they got it fixed. The air is getting fouler by the minute. Nearly everyone is panting now, like dogs. No one thinks it's funny.

1515. John Carter has been working like a madman with the crew, fighting the spore. They have found that oil of wintergreen, sprayed into the air, slightly inhibits the reproduction of the spore. At first the change in the odor of the air was heavenly, but our nostrils quickly became insensitive to it and it was lost in the general stench.

1830. We have just been readmitted to the Bullpen for supper. All the walls are blackened and scarred with fire. The place looks leprous and terribly depressing, but it's clean of the spore. They even cleaned the air, and, although it's still heavy with CO₂, it seems marvelous. I ate my supper with a good appetite. Johnny was right next to me, eating silently and looking so tired. I couldn't stand it. I blurted right out what had been making me act like such a fool. He didn't

laugh or anything. He just looked at me for a long time and then said, "That means I'm important to you, I think." I said "yes". What else was there to say? Then he took my face in his hands and gravely kissed me.

Third day. 0830. We've just finished breakfast. The Captain has announced that we will all remain in the Bullpen "for the time being". It's larger than the Space, but it suddenly seemed awfully small and crowded. Everyone's face is red and we perspire. One of the crew has rigged up a fan that keeps the air circulating, but the breathless feeling is bad and getting worse. Another announcement. Tomorrow we will go into a parking orbit around Mars. Evervone has crowded to the portholes and is waiting for his turn to look. Odd how nobody had thought to look out of the ship for the last three days. Some who have already looked say the planet looks enormous. Some claim they can make out features of the landscape and no one even believes he has seen the settlement, but that's impossible.

1200. The fight against the spore is won! One of the crew began sticking plastic tape over anchored colonies whenever they were found, meaning to come back later and burn or poison them. When they stripped the tape off later the spores had died in their own waste product—carbon diox-

ide. It's over now but they are working furiously to reassemble the air circulation system before it becomes necessary to use the retro-rockets. It will take very little force to put us into orbit, but enough to give us a small gravity again, and when that happens loose pieces of equipment will become dangerous missiles.

1400. Someone remarked that we might be in parking orbit long enough for everybody to suffocate or even starve. For a minute it looked as though there might be a panic until Alice Collow spoke up.

"Don't be an idiot," she said, loudly enough for everybody to hear her, "they'll take us down in the ferry rockets just as they have always done. Your skins aren't contaminated with the damn spore!" I could have kissed her. Then some other fool said something about not being able to live on Mars without Marsuits. That started an argument, but the worst scare was over.

Fourth day. 1100. We have decelerated and are in orbit. Our cabins are clean and we're comfortable again. Everything works again but the air is terribly foul. No one minds. We are all looking forward to landing. They've found a way to decontaminate the Marsuits. The worst is over.

There, Dee. That's all of my notes except certain personal parts I've left out. In a few more hours I'll be landing. I don't know that I'll ever have the courage to come

back home. But we'll face that when the time comes. I'm going to sign off now. Hug Aunt Vannie for me. The next time you'll hear from me will be from Mars. I'll even make Daddy add something to the tape.

CLICK.

Kennedy Space Center, Cape Kennedy, Florida, November 11, 2038.

Mr. and Mrs. Arthur A. Thomas, 1442 Calla Circle, Orlando, Florida. Dear Art and Dee:

It seems like much longer than ten months since we had our first supper together here at the Cape, and now in a few more weeks it will be Christmas again. We hope to see you before then, of course, but if we don't, Callie is preparing one of her famous plum puddings for you two and will send it over in time for Christmas dinner.

This letter is not really to send you advance Christmas greetings, though. I'll get right at it and tell you that today we had a few split seconds at the end of an official laser-cast and here's what was tacked onto the end of it:

First your address. Then—"Announcing the birth of Miss Florence Vannevar Carter, weight 1 kilo 360 grams, eyes blue. Mother and father doing marvelously. Love. John and Thelma."

Now don't be alarmed at young Florence's weight. That's about

eight pounds earth-weight in Florida. We had part of a second of free time on another Earth-Mars laser-cast and I took the liberty of adding, "Congratulations to all three. Dee, Arthur and Aunt Vannie."

So, all the best to you all. See you soon, we hope.

Sincerely, Alf (Alfred A. Riddiger, Lt. Col., USAF)

THE DRAMATIC RAY BRADBURY

It's been obvious for some time that moviemakers and theatrical producers have been agonizingly slow in recognizing the potentialities of Science Fiction. However, there are indications that the movie and theater people are finally beginning to look beyond the comic books for SF source material; and the name often associated with the most encouraging projects is that of Ray Bradbury. Alan Pakula and Robert Mulligan (To Kill A Mockingbird) are now working on a \$10 million production of Bradbury's The Martian Chronicles, and François Truffaut (The 400 Blows, Jules and Jim) is at work on a film version of Farenheit 451. In the theater, Ray Bradbury is moving ahead on his own, and he has set up the Pandemonium Theater Company in Los Angeles. At this writing The World of Ray Bradbury was being staged there to standing-room crowds. The evening consists of three one-act plays, adapted by Mr. Bradbury from his own short stories: The Veldt, The Pedestrian and To the Chicago Abyss. To the Chicago Abyss was first published in our special (May 1963) Bradbury issue (also containing one other Bradbury story as well as a complete bibliography of his work). Some back issues of this collector's item are available to our readers at \$1.00 each.

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