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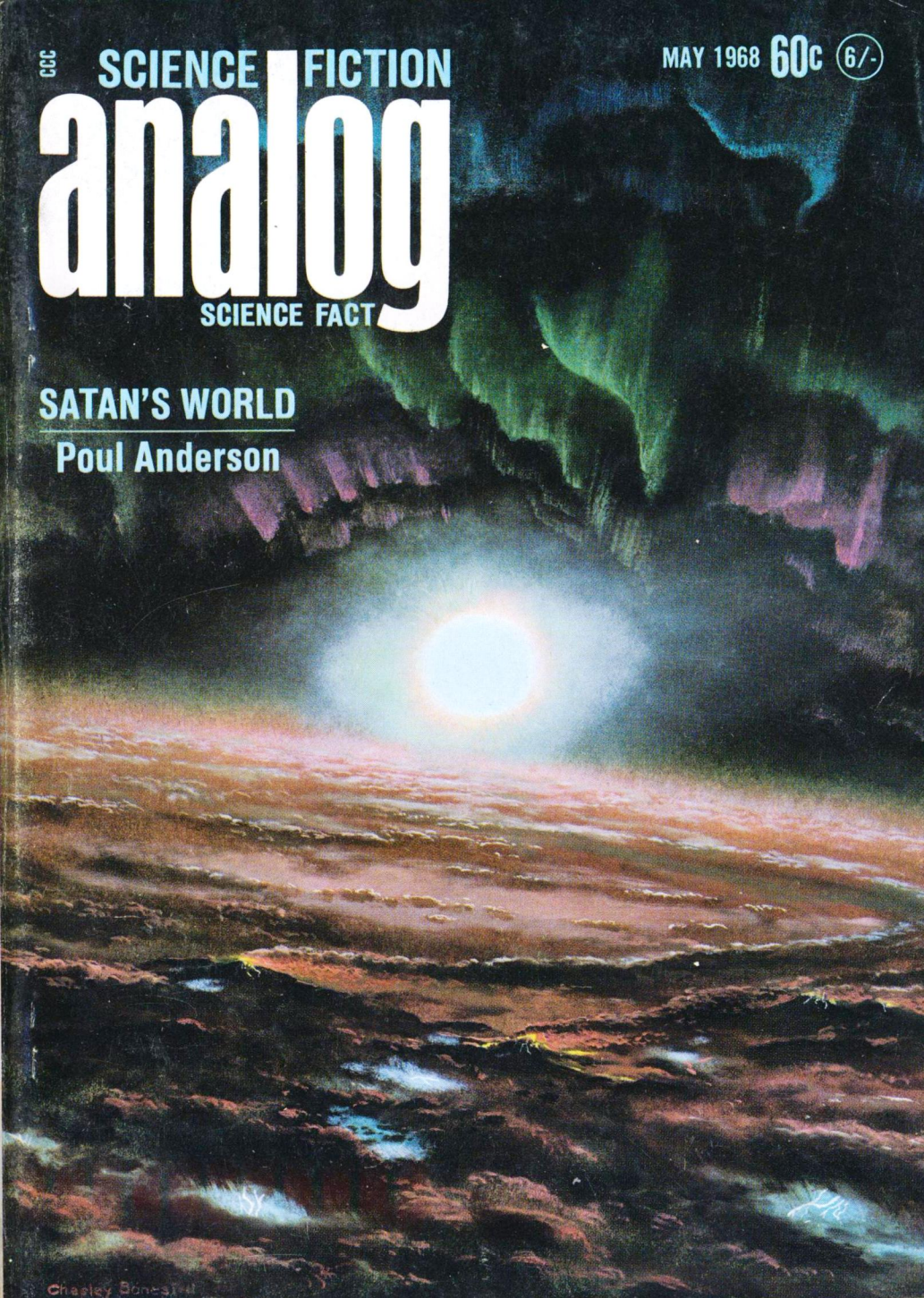
SCIENCE FICTION analog SCIENCE FACT

MAY 1968 60c (6/-)

SATAN'S WORLD

Poul Anderson



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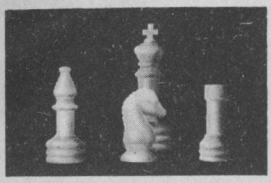

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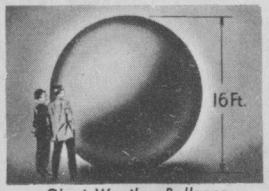

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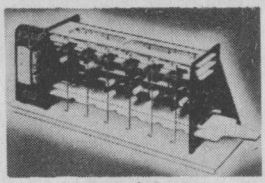

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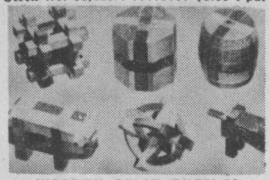

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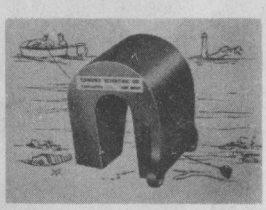

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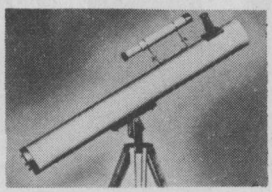

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Prophecy

An editorial by John W. Campbell

During the last decade or so it's become almost routine for the major figures in science fiction to be asked by various news services, magazines, radio commentators, et cetera, to provide prophecies of what's coming up in the next year, decade, or by 2000 A.D. Consequently, along around the first of the year I get a rush of requests of this type, which makes me more aware at this season (it's January as I write this) of the problems of *timed* prophecy.

To say, in the 1930s—when I started saying it!—that "Men will land on and explore the Moon," was, it seemed then and seems now, somewhat—but not much!—less sure than predicting that the Sun would appear next morning. The Moon's there, and we're here, and our nature is such that something will be done about those two facts to bring them into coincidence.

But to say "Men will land on the Moon by 1970" was a very different thing.

In 1950 I was saying that men would reach the Moon with chemical powered rockets—but that we'd have nuclear powered ships by the time we reached Mars. I still believe that—but no one can, as of now, put a timed date on the first Martian Expedition. The Kiwi reactors—the flightless nuclear rocket studies the United States has been conducting—are well along, however, and progressing well; we probably will have workable nuclear-powered rockets before the full problems of a two- to three-year life-support system are solved.

But those prophecies are very simple extrapolations of things now-in-hand, and using known methods to achieve well-explored-in-theory goals.

The great problems of prophecy, the really exciting ones, all lie in the area of the Now Totally Unknown.

First, be it recognized that we are, scientifically, abysmally ignorant. We've had true experimental science for only about three hundred years, and have achieved some magnificent progress in that brief moment. Any "scientist" who says that we now know all the basic principles of the Universe is about equivalent to a four-year-old claiming he now knows all the important facts of Life and Living. He's bright, and he's a fast learner, and he's doing very well, but . . .

What does the "scientist" expect succeeding generations of scientists

to do during the next millennium? Worship the unsurpassable achievements of his generation? Erect monuments to the mighty wisdom of those who have already learned all there is to know?

We know all the fundamental principles of the Universe? When we haven't the foggiest notion of the real nature of the greatest of all forces in the Universe, gravity? And don't know the relationship between gravity, magnetism and electric fields? When we can't imagine any possible mechanism that could account for the observed energy output of quasars?

When we're only just beginning to discover the physical mechanisms underlying the astro*logical* forces that operate on Earth's weather? (We have an article coming up on that; the underlying mechanism has been found, and it is real.)

Science, today, has a magnificent beginning, of which we can well be proud. Just as the Egyptians had made immense discoveries in mathematics, geometry and structural engineering when they built their pyramids five thousand years ago. Of course, there have been a few advances since that time . . .

What will science be doing—and doing it with—when radio is a 5,000-year old invention—its origin lost in the mist of time?

Actually, a more important aspect is nothing so esoteric. I've pointed out previously in these pages a quite simple fact that every executive-level engineer today knows—but easily overlooks. The problem is best stated this way:

Suppose that one of those drone reconnaissance planes we send over China when the Reds hold one of their bomb tests gets kicked slidewise in Time, and winds up making a deadstick landing on the Army Air Corps research station at Dayton, Ohio, in 1930.

Naturally, the scientists swarm around it to find out what goes on. It has obvious U.S. markings—but they're modified, clearly not the here-and-now (1930) version. But it's quickly found that many components have well-known U.S. manufacturer's nameplates. General Electric, Bendix, Westinghouse, Western Electric—it's clearly an American product.

But it's also very rapidly clear that it can't possibly exist. For one thing, it's radioactive all over to some degree—and one of the principal radioactives present is *barium*. But barium is totally nonradioactive; it's known-for-a-positive-fact that barium, in this universe, is a stable, nonradioactive element! There's no detectable radium present, and only slight traces of uranium, but half the elements in the periodic table are showing up radioactive! It's impossible! It's not just theoretically impossible; it's known by direct, positive observation that those elements *are not radioactive*. But here, they are!

It also has radio devices that can be recognized as such because they give off strong, sharply tuned beacon signals. At least they do until the most remarkably potent small batteries eventually give out. But the radio transmitters don't have any recognizable vacuum tubes, and some kind of a vaguely vacuum-tubelike gadget may be a radio device of some kind, but no detectable emission is coming from it. (It's a lighthouse tube operating at a low microwave frequency that nothing then on Earth could pick up.) The integrated circuit modules, servo-amplifier systems, and computer systems all use silicon chip transistors, diodes, et cetera. Some of the power-handling transistors are big enough to be analyzed by the gross techniques then available to chemistry, and would simply be found to be "pure" silicon. Not having remotely adequate techniques, they'd have no idea *how* pure, and certainly couldn't duplicate them.

The radar gear's microwave plumbing, based on principles not recognized in 1930, would be completely meaningless and unusable.

Some of the gallium arsenide solid-state laser internal communication gadgets would drive them quite berserk. The gadgets lase only if given very massive currents—thousands of amperes—which will cause them to explode in a matter of a few milliseconds. Until radar was developed during WWII, tech-

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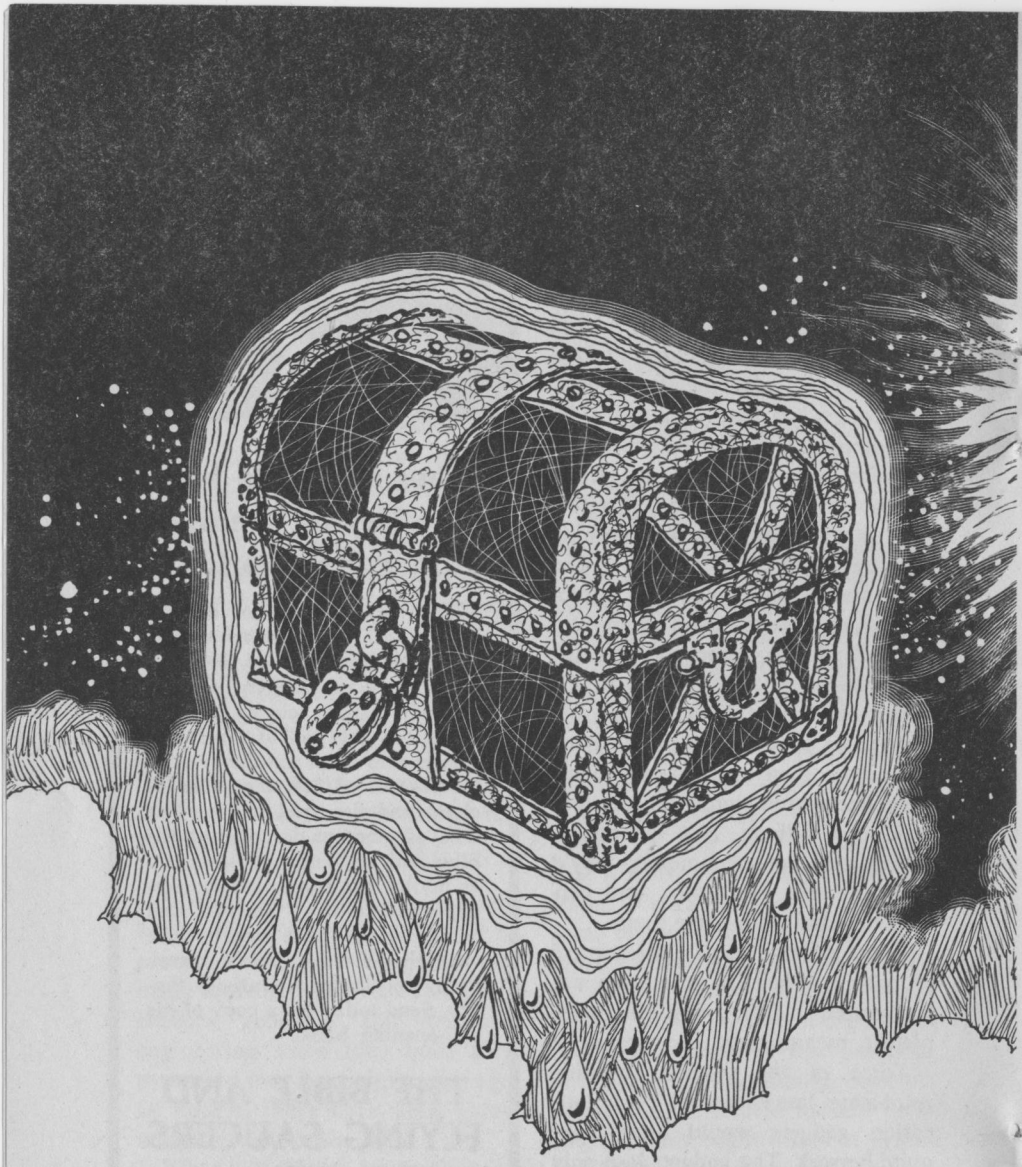
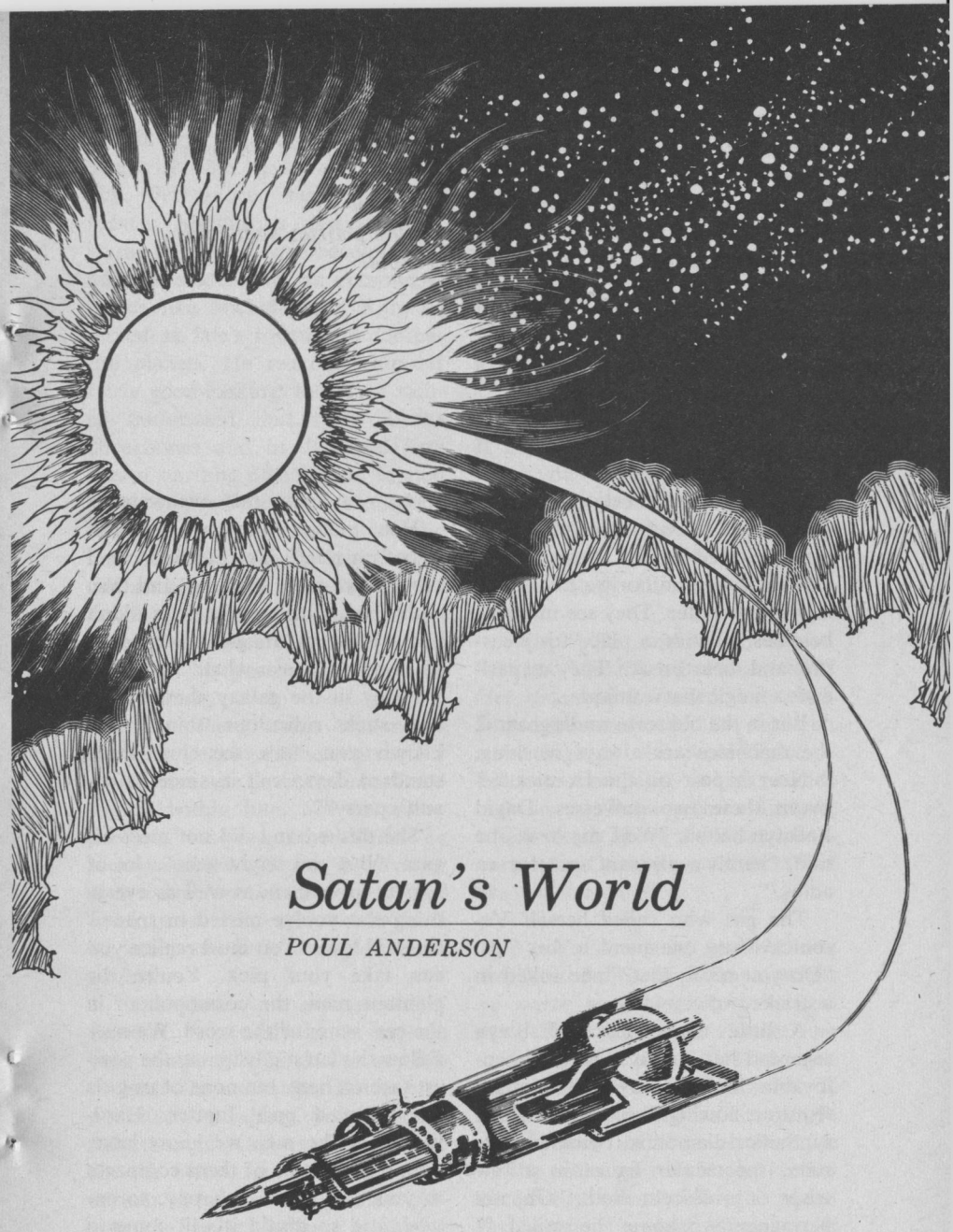




Satan's World

POUL ANDERSON

First of Four Parts.
The Trader Team of van Rijn's Spice & Liquors Company found a new use for an old planet—twenty billion years or so dead and frozen—which meant a fortune so vast interstellar politics suddenly twisted sidewise . . . into violent trouble!

ILLUSTRATED BY KELLY FREAS

Elfland is the new section of Lunograd. So it is written, and, therefore, believed by the computers of administrative authority. Living beings know better. They see marvels, beauties, gaieties, a place for pleasure and heartbreak. They experience a magic that is unique.

But in the old town underground, the machines are always working.

Near a post on the frontier between these two universes, David Falkayn halted. "Well, my love," he said, "here's a pleasant spot for an adios."

The girl who called herself Veronica lifted one hand to her lips. "Do you mean that?" she asked in a stricken voice.

A little taken aback, Falkayn regarded her closely. She made enjoyable looking anyhow: piquant features, flowing dark hair in which synthetic diamonds twinkled like stars, spectacular figure in a few wisps of iridescent cloth. "Oh, not permanently, I hope," he smiled. "I simply had better get to work. Shall I see you again this evenwatch?"

Her mouth quivered upward. "That's a relief. You startled me. I thought we were strolling, and then with no warning you—I didn't know what to imagine—were you getting rid of me or what."

"Why in the galaxy should I do any such ridiculous thing? I've known you, let's see, just three standard days, isn't it, since Theriault's party?"

She flushed and did not meet his gaze. "But you might want a lot of variety in women, as well as everything else you've missed in space," she said low. "You must realize you can take your pick. You're the glamour man, the cosmopolitan in the real sense of the word. We may follow the latest gossip and the newest fashion here, but none of us girls has traveled past Jupiter. Hardly any of the men we know have, either. Not a one of them compares to you. I've been so happy, so envied, and so afraid it will come to a sudden end."

Falkayn's own blood beat momentarily high. Smugness tempted him. Few indeed had won their Master Merchant's certificate as young as he, let alone become confidential associate of an uncrowned prince like Nicholas van Rijn, or served as fate's instrument for entire planets. He reckoned himself fairly good-looking, too: face rather snub-nosed, but high in the cheekbones and hard in the jaw; eyes a startling blue against tanned skin; curly yellow hair bleached by foreign suns. He stood an athletic one hundred ninety centimeters tall; and he might be newly arrived from the outermost bourn of known space, but Luna's best clothier had designed his pearl-gray tunic and gold culottes.

Whoa, there, son. An animal alertness, developed in countries for which man was never meant, stirred to life within him. *She isn't performing for free, remember. The reason I didn't tell her in advance that today I return to the job, still holds good: I'd prefer not to have to worry about prearranged shadowings.*

"You flatter me outrageously," he said, "especially by giving me your company." His grin turned impudent. "In exchange, I'd love to continue outraging you. Dinner first, though. Maybe we'll have time for the ballet, too. But dinner for certain. After my long while outside the Solar System, exploring wild new planets, I'm most anxious to continue exploring wild new restaurants"—he bowed—"with such a delightful guide."

Veronica fluttered her lashes. "Native scout glad-glad servem big captain from Polesotechnic League."

"I'll join you soon's I can manage after eighteen hundred hours."

"Please do." She tucked an arm beneath his. "But why part at once? If I've declared myself on holiday—for you—I can keep on with you to wherever you're bound."

His animal showed teeth. He must remind himself to stay relaxed. "Sorry, not possible. Secrecy."

"Why?" She arched her brows. "Do you actually need theatricals?" Her tone half bantered, half challenged his manhood. "I'm told you stand high in the Solar Spice & Liquors Company, which stands high in the Polesotechnic League, which stands above planetary law—even the Commonwealth's. What are you afraid of?"

If she's trying to provoke me, me, flashed through Falkayn, *might be worth provoking right back at her.* "The League isn't a unity," he said as if to a child. "It's an association of interstellar merchants. If it's more powerful than any single government, that's simply because of the scale on which star traders necessarily operate. Doesn't mean the League is a government, too. It organizes cooperative, mutual-ben-

efit activities, and it mediates competition that might otherwise become literally cutthroat. Believe me, however: rival members don't use outright violence on each other's agents, but chicanery is taken for granted."

"So?" Though a lecture on the obvious was perhaps insulting, he thought the resentment that flickered in her expression came too fast to be uncalculated.

He shrugged. "So, with all proper immodesty, I'm a target figure. Right-hand man and roving troubletwister for Old Nick. Any hint as to what I'll be doing next could be worth megacredits to somebody. I have to watch out for, shall we say, commercial intelligence collectors."

Veronica released him and stepped back. Her fists clenched. "Are you implying I'm a spy?" she exclaimed.

As a matter of fact, Falkayn thought, *yes.*

He wasn't enjoying this. In search of inner peace, he let his gaze travel past her for a second. The setting was as lovely and not altogether real as she was.

Elfland was not the first unwalled community built on the Lunar surface. But on that account, its designers could take advantage of previous engineering experience. The basic idea was simple. Spaceships employ electromagnetic screens to ward off particle radiation. They employ artificially generated positive and negative gravity fields not only for propulsion, not only for constant weight inside the hull at every acceleration, but also for tractor and pressor beams. Let us scale up these systems until they maintain a giant bubble of air on an otherwise empty surface.

In practice, the task was monumental. Consider problems like leakage, temperature regulation, and ozone layer control. But they were solved; and their solution gave to the Solar System one of its most beloved resorts.

Falkayn saw a park around the girl and himself, greensward, arbors, flowerbeds that were a riot of rainbows. In Lunar gravity, trees soared through heights and arcs no less fantastic than the splashing fountains; and people walked with that same marvelous bounding lightness. Behind the crowds, towers and colonnades lifted in fanciful filigree multitudinously hued. Birds and elevated streets flew between them. Perfumes, laughter, a drift of music, a pervasive murmur of engines wove through the warm air.

But beyond and above stood Luna. Clocks ran on GMT; a thousand small suns hanging from bronze vines created morning. Yet the true hour neared midnight. Splendid and terrible, darkness struck through. At zenith, the sky was black, stars icily visible. South swelled the cloudy-bright-blue shield of Earth. A close observer

could see twinkles on its unlit quarter, the megalopolises, dwarfed to sparks by that least astronomical distance. The Avenue of Sphinxes gave a clear westward view to the edge of air, an ashen crater floor, Plato's ringwall bulking brutally over the near horizon.

Falkayn's attention went back to Veronica. "I'm sorry," he said. "Of course I don't intend anything personal."

Of course I do. I may range in the galactic outback, but that doesn't mean I'm an especially simple or trusting soul. Contrariwise. When a lady this desirable and sophisticated locks onto me, within hours of my making planetfall . . . and obliges me in every possible way except telling me about herself —a little quiet checking up by Chee Lan proves that what vague things she does say are not in precise one-one correspondence with truth . . . what am I supposed to think?

"I should hope not!" Veronica snapped.

"I've sworn fealty to Freeman van Rijn," Falkayn said, "and his orders are to keep everything below decks. He doesn't want the competition to get in phase with him." He took both her hands. "It's for your own sake too, heartlet," he added gently.

She let her wrath fade. Tears came forth and trembled on her lids with what he considered admirable precision. "I did want to . . . to share with you . . . more than a few days' casual pleasure, David," she whispered. "And now you call me a spy at worst, a blabbermouth"—she gulped—"at best. It hurts."

"I did nothing of the sort. But what you don't know can't get you in trouble. Which is the last place I'd want you to be in."

"But you said th-there wasn't any . . . violence—"

"No, no, absolutely not. Murder, kidnapping, brainscrub . . . Polesotechnic League members don't indulge in such antics. They know better. But that doesn't mean they're tin saints. They, or certain of their hirelings, have been known to use fairly nasty ways of getting what's wanted. Bribery you could laugh at, Veronica." *Ha!* Falkayn thought. *"Jump at" is the correct phrase, I suspect. What retainer were you paid, and what're you offered for solid information about me?* "But worse approaches are possible. They're frowned on, but sometimes used. Every kind of snooping, for instance; don't you value your privacy? A hundred ways of pressure, direct and indirect, subtle and unsubtle. Blackmail —which often catches the innocent. You do a favor for somebody, and one thing leads to another, and suddenly the somebody has fastened the screws on you and begun tightening them."

As you probably figure to do with me, his mind added. Wryly: *Why*

shouldn't I let you try? You're the devil I know. You'll keep off the devils I don't know, and meanwhile provide me some gorgeous fun. A dirty trick, perhaps, for a cunning unscrupulous yokel like me to play on a naïve city operator like you. But I believe you get honest enjoyment out of my company. And when I leave, I'll give you an inscribed firestone bracelet or something.

She pulled loose from his grasp. Her tone stiffened again. "I never asked you to violate your oath," she said. "I do ask not to be treated like a spineless, brainless toy."

Ah, so. We put frost back in the voice, eh? Hoarfrost, to be exact. Well, I can't argue for the rest of this week. If she won't reverse vectors, forget her, son.

Falkayn snapped to virtual attention. His heels clicked. A machine might have used his throat: "Freelady, my apologies for inflicting my society upon you under conditions you appear to find intolerable. I shall not trouble you further. Good day." He bowed, wheeled, and strode off.

For a minute he thought it hadn't worked. Then she uttered almost a wail, and ran after him, and spent a tearful time explaining how she had misunderstood, and was sorry, and would never, never get off orbit again, if only he—

She might even be partly sincere.

It helped, being a scion of a baronial house in the Grand Duchy of Hermes, Falkayn reflected. To be sure, he was a younger son; and he'd left at an early age, after kicking too hard against the traces that aristocrats were supposed to carry; and he hadn't visited his home planet since. But some of that harsh training had alloyed with the metal of him. He knew how to deal with insolence.

Or how to stick with a job when he'd really rather prolong his vacation. He got rid of Veronica as fast as was consistent with a reconciliation scene, and proceeded on his way.

II

First he passed through a large sporting goods store on the other side of the park. He should be able to shake off any followers among the wares on exhibition. The vac suits and vehicles were less bulky than he had counted on. But then, a jaunt into the Lunar mountains, rescue flitters available within minutes of a radio call, was not like hiking off on an unmapped world where you were the sole human being for several light-years. The collapsible boats with their gaudy sails were more helpful. He wondered how popular they were. Lake Leshy was small, and low-weight sailing tricky until you got the hang of it—as he had learned beyond the Solar System.

Emerging from a rear door, he found a kiosk and entered the drop-

shaft. The few people floating down the G-beam with him seemed like ordinary citizens.

Maybe I'm being overcautious, he thought. *Does it matter if our competitors know I've paid a visit to Serendipity, Incorporated? Shouldn't I try to remember this isn't some nest of nonhuman barbarians? This is Terra's own moon, at the heart of the Commonwealth! The agents of the companies don't fight for naked survival, no holds barred; essentially, they play a game for money, and the losers don't lose anything vital. Relax and enjoy it.* But habit was too strong, reminding him of the context in which that last bit of advice had originally been given.

He got off at the eighth sublevel and made his way along the corridors. Wide and high, they were nonetheless crowded with traffic: freightways, robotic machines, pedestrians in workaday coveralls. Their facings were in plain pastel tones, overlaid by an inevitable thin film of grime and oil. The doors opened on factories, warehouses, shipping depots, offices. Rumble and rattle filled the air, odors of crowded humanity, chemicals, electrical discharges. Hot gusts struck out of fenced-off grilles. A deep, nearly subliminal vibration quivered through rock and floor and shinbones, the toil of the great engines. Elfland was a pretty mask; here, in the industrial part of old Lunograd, were the guts.

Gagarin Corridor ended, like many others, at Titov Circus. The hollow cylinder of space, reaching from a skylighting dome where Earth and stars gleamed, down to the depths of excavation, was not as big as Falkayn's impression had been from its fame. But it was built in early days, he reflected. And certainly the balconies which encircled it on every level were thronged enough. He must weave his way through the crowds. They were local people mostly, workers, businessmen, officials, monitors, technicians, housewives, showing more in their gait and mannerisms than in their bodies the effects of generations on Luna. But there were plenty of outsiders, merchants, spacemen, students, tourists, including a wild variety of nonhumans.

He noted that the prestigious stores, like Ivarsen Gems, occupied cubbyholes compared to newer establishments. Really big money has no need to advertise itself. Boisterous noises from the Martian Chop House tempted him to stop in for a mug of its ale, which he'd heard about as far away as Betelgeuse. But no . . . maybe later . . . duty was calling, "in a shrill unpleasant voice," as van Rijn often said. Falkayn proceeded around the balcony.

The door he reached at length was broad, of massive bronze, decorated with an intricate bas-relief circuit diagram. Stereoprojection

spelled SERENDIPITY, INC. a few centimeters in front. But the effect remained discreet. You might have supposed this outfit to have been in operation these past two centuries. And instead, in—fifteen years, was that the figure—it had rocketed from nowhere to the very firmament of the Polesotechnic League.

Well, Falkayn thought, *in a free-market economy, if you see a widespread need and can fill it, you get rich fast. Actually, when Old Nick organized his trade pioneer teams, like mine, he set them to doing in a physical way what Serendipity was already doing in its computers.*

A certain irony here. Adzel, Chee Lan, and I are supposed to follow up whatever interesting reports our robot probes bring back from hitherto unvisited planets. If we see potentially valuable resources or markets, we report back to van Rijn, very much on the QT, so he can exploit them before the rest of the League learns they exist. And yet I, the professional serendipist, have come to Serendipity, Inc. like any hopeful Earthlubber businessman.

He shrugged. His team had been overdue for a visit to the Solar System. Having arrived, they might as well see if the data-processing machines could free-associate them with an item that pointed in some profitable direction. Van Rijn had agreed to pay the fees, without bellowing very much.

The door opened. Instead of a lobby, Falkayn entered a room, luxuriously draped but miniature, from which several other doors led. A vocolyre sang, "Good day, sir. Please take Number Four."

That led down a short, narrow passage to still another door and thus finally to an office. Unlike most chambers in Lunograd, this one did not compensate for lack of windows with some landscape film played on a wall screen. In fact, though the carpeting was deep and rich blue, walls azure, ceiling mother-of-pearl, air flower-scented, furniture comfortable, the total effect was somehow stark. At one end, a woman sat behind a large desk. The battery of secretarial gadgets around her suggested a barricade.

"Welcome," she said.

"Thanks," he replied with an attempted grin. "I felt as if I were invading a fortress."

"In a way, sir, that was correct." Her voice could have been pleasantly husky, the more so when she spoke Anglic with a guttural accent that not even his widely traveled ear could identify. But it was too crisp, too sexless; and her smile gave the same impression of having been learned. "Protection of privacy is a major element of our service. Many do not wish it known they have consulted us on a specific occasion. We partners receive each client in person, and usually need not call on our staff to help."

That better be the case, Falkayn

thought, *seeing what a whopping sum you charge just for an appointment.*

She offered her hand without rising. "I am Thea Beldaniel." The clasp was perfunctory on both sides. "Please be seated, Freeman Kubichek."

He lowered his frame into a lounger. It extended an arm, offering excellent cigars. He took one. "Thanks," he repeated. "Uh, now that I'm here, I can drop the *nom du phone*. Most visitors do, I'm sure."

"Actually, no. There is seldom any reason, until they are alone with the machines. Of course, we are bound to recognize many because they are prominent." Thea Beldaniel paused before adding, with a tactfulness that appeared equally studied: "Prominent in this galactic neighborhood, that is. No matter how important some beings may be, no living brain can recognize them all, when civilization extends across scores of light-years. You, sir, for example, are obviously from a colonized planet. Your bearing suggests that its social structure is aristocratic, yourself born into the nobility. The Commonwealth does not have hereditary distinctions. Therefore your home world must be autonomous. But that leaves quite a few possibilities."

Since he had long been curious about this organization, he tried to strike up a genuine conversation. "Right, Freelady. I'm not on political business, though. I work for an Earth-based company, Solar Spice & Liquors. My real name's David Falkayn. From Hermes, to be exact."

"Everyone knows of Nicholas van Rijn," she nodded. "I have met him personally a few times."

I must confess to myself he's the main reason I've been lionized, Falkayn thought. *Reflected glory. By now, high society is a-buzz about me. Invitations are pouring in, from the emperors of industry, their wives, daughters, hangers-on, to the bold space ranger and his partners, in honor of our (largely unspecified) exploits among the far stars. But that's because we aren't just any bold space rangers, we're Old Nick's bold space rangers.*

A paradox remains. The Beldaniel sisters, Kim Yoon-Kun, Anastasia Herrera, Freeman and Freelady Latimer—the founders and owners of Serendipity, Inc., which aims to correlate all the information in known space—they haven't heard about us. They don't go out in society. They keep to themselves, in these offices and in that castle where outsiders never visit . . . I truly would like to get a rise out of this woman.

She wasn't bad-looking, he realized piecemeal. Indeed, she could be called handsome: tall, lithe, well-formed, no matter how much the severe white slacksuit tried to conceal that fact. Her hair was cut short, but this only emphasized a

good shape of head; her face was practically classic, except that you thought of Athene as showing a bit more warmth. Her age was hard to guess. She must be at least in her forties. But having taken care of her body and, doubtless, advantage of the best antisenescence treatments, she might be older by a decade, and yet show merely the same gray streak in brown tresses, slight dryness in the clear pale skin, crow's-feet about the eyes. Those eyes were her best feature, Falkayn decided, wide-spaced, large, luminous green.

He started his cigar and rolled the smoke about his tongue. "We may find ourselves bargaining," he said. "Don't you buy information, either for cash or for remittance of fees?"

"Certainly. The more the better. I must warn you that we set our own prices, and sometimes refuse to pay anything, even after the item has been given us. You see, its value depends on what is already stored in the memory banks. And we can't let others see this. That would risk betrayal of secrets entrusted to us. If you wish to sell, Freeman Falkayn, you must rely on our reputation for fair dealing."

"Well, I've visited a lot of planets, species, cultures—"

"Anecdotal material is acceptable, but not highly paid for. What we most desire is thorough, accurate, documented, quantitative facts. Not necessarily about new discoveries in space. What is going on in the major civilized worlds is often of greater interest."

"Look," he said bluntly, "no offense meant, but I've been wondering. I work for Freeman van Rijn, and in an important capacity. Suppose I offered you details about his operations that he didn't want released. Would you buy them?"

"Probably. But we would not then release them to others. Our whole position in the Polesotechnic League depends on our trustworthiness. This is one reason why we have so few employees: a minimal staff of experts and technicians—all nonhuman—and otherwise our machines. In part, it is a good reason for us to be notoriously asocial. If Freeman van Rijn knows we have not been partying with Freeman Harleman of Venusian Tea & Coffee, he has the fewer grounds for suspecting us of collusion with the latter."

"Coffee grounds?" Falkayn murmured.

Thea Beldaniel folded her hands in her lap, sat back, and said: "Perhaps, coming from the frontier as you do, Freeman, you don't quite understand the principle on which Serendipity, Inc. works. Let me put it in oversimplified language.

"The problem of information retrieval was solved long ago, through electronic data storage, scanning, coding, and replication. But the problem of information usage con-

tinues acute. The preceptual universe of man and other space-traveling species is expanding still more rapidly than the universe of their exploration. Suppose you were a scientist or an artist, with what you believed was a new idea. To what extent has the thought of countless billions of other sophonts, on thousands of known worlds, duplicated your own? What might you learn from them? What might you contribute that is genuinely new? Well, you could ransack libraries and data centers, and get more information on any subject than is generally realized. Too much more! Not only could you not read it all in your lifetime, you could not pick out what was relevant. Still worse is the dilemma of a company planning a mercantile venture. What developments elsewhere in space will collide, compete, conceivably nullify their efforts? Or what positive opportunities are being overlooked, simply because no one can comprehend the overall picture?"

"I've heard those questions asked," Falkayn said. He spoke dryly, with puzzlement rather than resentment at being patronized. Was this woman so insensitive to human feelings—hell, to ordinary human common sense—that she must lecture a client as if he were some six-legged innocent newly hauled out of his planet's Stone Age?

"Obvious, of course," she said imperturbably. "And in principle, the answer is likewise obvious. Computers should not merely scan, but sift data. They should identify possible correlations, and test them, with electronic speed and parallel-channel capacity. You might say they should make suggestions. In practice, this was difficult. Technologically, it required a major advance in cybernetics. Besides . . . the members of the League guarded their hard-won knowledge jealously. Why tell anything you knew to your rival? Or to public data centers, and thus indirectly to your rival? Or to a third party who was not your competitor but might well make a deal with your rival—or might decide to diversify his interests and himself become your rival?

"Whether or not you could use a datum, it had cost you something to acquire. You would soon go bankrupt if you made a free gift of every item. And while secrets were traded, negotiations about this were slow and awkward.

"Serendipity, Inc. solved the problem with improved systems—not only better robotics, but a better idea for exchanging knowledge."

Falkayn sat back with his cigar. He felt baffled, fascinated, the least bit frightened. This female was even weirder than he had been told the partners were. Giving a basic sales pitch to a man who'd already bought an appointment . . . in God's name, *why?* Stories were rife about the origin of these people.

But what story might account for the behavior he was observing?

Beneath her quick, level words, intensity gathered: "The larger the information pool, the greater the probability of making a correlation that is useful to a given individual. Thus the creation of such a pool was to the general benefit, provided that no one gained a special advantage. This is the service that we have offered. We draw on ordinary sources, of course. And that in itself is valuable, there being so many libraries and memory banks scattered on so many planets. But in addition, we buy whatever anyone cares to tell, if it is worthwhile. And we sell back whatever other data may be of interest to him. The important point is, this is done anonymously. We founders of the business do not know or wish to know what questions you ask, what answers you get, what you relate, how the computers appraise it, what additional conclusions their logic circuits draw. Such things stay in the machines. We only concern ourselves, or our staff, with a specific problem if we are requested to. Otherwise our sole attention is on the statistics, the input-output average. Our firm has grown as trust in us has grown. Innumerable private investigations have shown that we favor no one, do not blurt anything out, and cannot be corrupted. Likewise has the accumulated experience of doing business with us."

She leaned forward. Her gaze was unblinking on him. "For example," she said, "imagine that you did wish to sell us confidential information about your company. Mere word-of-mouth assertions would be filed, since a rumor or falsehood is also a datum, but would probably not be believed. The usual precautions against commercial espionage should safeguard documentary evidences. But if this fails—yes, we will buy it. Cross-checks will quickly show that we have bought thief's goods, which fact is noted. If your employer was the only one who possessed the information, it will not be given out until somebody else has registered the same thing with us. But it will be taken into account by the logic circuits in preparing their recommendations—which they do impersonally for any client. That is to say, they might advise your employer's rival against a certain course of action, because they know from the stolen information that this will be futile. But they will not tell him why they offer such counsel."

Falkayn got a word in fast while she caught up on her breathing: "That makes it to everybody's advantage to consult you on a regular basis. And the more your machines are told during consultations, the better the advice they can give. Uh-huh. That's how you grow."

"It is one mechanism of growth for us," Thea Beldaniel said. "Actually, however, information theft is very minor. Why should Free-

man van Rijn not sell us the fact that, say, one of his trading ships happened upon a planet where there is a civilization that creates marvelous sculptures? He is not in the art business to any significant extent. In exchange, he pays a much reduced fee to learn that a crew of hydrogen-breathing explorers have come upon an oxygen-atmosphere planet that produces a new type of wine."

"I'm not clear about one thing," Falkayn said. "My impression is he'd have to come in person to be told any important fact. Is this true?"

"Not in that particular case," she answered. "His needs would be obvious. But we must safeguard privacy. You, for example—" She paused. The strangeness left her eyes; she said shrewdly: "I would guess that you plan to sit down before the machine and say, 'My name is David Falkayn. Tell me whatever might be of special interest to me.' No doubt you have good reason to expect that the memory banks include something about you. Now don't you realize, sir, for your own protection, we can't let anyone do this? We must ask for positive identification."

Falkayn reached into his pocket. She raised a palm. "No, no," she said, "not to me. I don't have to know whether you really are who you claim to be. But to the machine—retinal scan, fingerprints, the usual procedures if you are registered in the Commonwealth. If not, it will suggest other ways to establish yourself to its satisfaction." She rose. "Come, I'll take you there and demonstrate its operation."

Following her and watching, Falkayn couldn't decide whether or not she walked like a frigid woman.

No matter. A more interesting thought had struck him. He believed he could tell why she behaved the way she did, dwelt on elementary details though she must realize he knew most of them already. He'd encountered that pattern elsewhere. It was usually called fanaticism.

III

Seated alone—and yet not alone, for the great quasi-brain was there and had already spoken to him—Falkayn took a moment to consider his surroundings. Though he had spent his life with robots, including his beloved Muddlehead, this one felt eerie. He tried to understand why.

He sat in an ordinary self-adjusting chair before an ordinary desk with the standard secretarial apparatus. Around him were bare gray walls, white fluorolight, odorless recycled air, a faint humming through stillness. Confronting him was a basic control panel and a large 3D screen, blank at the moment. What was strange?

It must be subjective, he decided, his own reaction to the mystery

about this organization. The detectives of a wary League had verified that the founder-owners of Serendipity, Inc. had no special ties to any other group—or, for that matter, to anyone or anything, human or nonhuman, throughout known space. But their origin remained obscure. Their chilly, graceless personalities (Thea Beldaniel was evidently typical of the whole half dozen) and aloofness from society only emphasized that basic isolation.

Their secret could not be ferreted out. Quite apart from the regard for privacy inherent in today's individualism, it wasn't feasible. The universe is too big. This tiny segment of the fringe of one spiral arm of a single galaxy which we have somewhat explored and exploited . . . is too big. In going to thousands of suns that intrigue us, we have passed by literally millions of others. It will take centuries even to visit them, let alone begin to understand them a little. And meanwhile, and forever, beyond the outermost radius of our faring will lie nearly all the suns that exist.

The partners had entered the Solar System in a cargo vessel loaded with heavy metals. Selling that for a good price, they established their information enterprise. Though they ordered many parts on Earth, the basic logic and memory units were brought from Elsewhere. Once, out of curiosity, Nicholas van Rijn had bribed a Commonwealth customs inspector; but that man merely said: "Look, sir, I verify that imports aren't dangerous. I make sure they don't carry disease, and aren't going to blow up, that sort of thing. What else can we stop, under a free trade law? What Serendipity got was just a shipment of computer-type stuff. Not human made, I'm sure. You get an eye for, uh, style, after a few years in my job. And if, like you tell me, nobody can quite duplicate the kind of work it's been doing since it was installed . . . well, jingles, sir, isn't the answer plain to see? These people found a planet that can do tricks we aren't up to yet, nobody we know about. They made a deal. They kept quiet. Wouldn't you? *Don't* you, sir?"

Falkayn started from his reverie. The machine had spoken again. "Pardon?" he said. Instantly: *What the devil am I doing, apologizing to a gadget?* He picked his cigar from the rack above the disposer and took a nervous puff.

"David Falkayn of Hermes and the Solar Spice & Liquors Company, your identity has been verified." The voice was not the flat baritone of most human-built robots; it was high, with a curious whistling quality, and varied both pitch and speed in a way hard to describe. "Your name is associated with a number of accounts in these data banks, most notably the episodes involving Beta Centauri, Ikrananka, and Merseia." *Judas*

priest! Falkayn thought. *How did it learn about Ikrananka?* "Many items are logically connected with each of these, and in turn connected with other facts. You will understand that the total ramifications are virtually infinite. Thus it is necessary to select a point and search the association chains radiating from it in a limited number of directions. If none of them are productive, other lines are tried, and eventually other starting points, until a satisfactory result is obtained." *Or until I run out of money*. "What type of search do you desire?"

"Well . . . I—" Falkayn rallied his shaken wits. "How about new markets on extrasolar planets?"

"Since confidential information is not released here, you are asking no service which ordinary data centers cannot provide."

"Now, wait. I want you to do what you're uniquely built to do. Take the points Me and Cash, and see what association chains exist between 'em."

Did the humming louden, or did the silence deepen? Falkayn leaned back and struggled to relax. Behind that panel, these walls, electrons and quanta hurtled through vacuum; charges and the absence of charges moved through crystal lattices; distorted molecules interacted with magnetic, electric, gravitational, nuclear fields; the machine thought.

The machine dreamed.

He wondered if its functioning was continuous, building immense webs of correlation and inference whether or not a client sat here. Quite probably; and in this manner, it came closer than any other entity to comprehending our corner of the universe. And yet the facts must be too many, the possible interconnections between them uncountable. The fruitful few were buried in that sheer mass. Every major discovery has involved a recognition of such rare meaningful associations. (Between the water level in a bath and the weight of gold; between the pessimism of a small-town parson and the mechanism of organic evolution; between the Worm Ouroboros, that biteth its own tail, and the benzene molecule—) Living creatures like Falkayn, coming from the living cosmos to the cave where this engine dwelt, must be what triggered its real action, made it perceive the significance of what had hitherto looked like another isolated fact.

"David Falkayn of Hermes!" the machine called.

"Yes?" He sat bolt upright and tensed.

"A possibility. You will recall that, a number of years ago, you showed that the star Beta Centauri has planets in attendance."

Falkayn couldn't help crowing, uselessly save that it asserted his importance in contrast to the huge blind brain: "I should forget? That was what really attracted the no-

tice of the higher-ups and started me to where I am. Blue giant suns aren't supposed to have planets. But this one does."

"That is recorded, like most news," said the machine, unimpressed. "Your tentative explanation of the phenomenon was later verified. While the star was condensing, a nucleus still surrounded by an extensive nebular envelope, a swarm of rogue planets chanced by. Losing energy to friction with the nebula, they were captured.

"Sunless planets are common. They are estimated to number a thousand or more times the stars. That is, nonluminous bodies, ranging in size from superjovian to asteroidal, are believed to occupy interstellar space in an amount greater by three orders of magnitude than the nuclear-reacting self-luminous bodies called stars. Nevertheless, astronomical distances are such that the probability of an object like this passing near a star is vanishingly small. Indeed, explorers have not come upon many rogues even in mid-space. An actual capture must be so rare that the case you found may well be unique in the galaxy.

"However, your discovery excited sufficient interest that an expedition set forth not long afterward, from the Collectivity of Wisdom in the country of Kothgar upon the planet Lemminkainen. Those are the Anglic names, of course. Herewith a transcript of the full report." A slot extruded a spooled microreel which Falkayn automatically pocketed.

"I know of them," he said. "Nonhuman civilization, but they do have occasional relations with us. And I followed the story. I had somewhat of a personal interest, remember. They checked out every giant within several hundred light-years that hadn't been visited before. Results negative, as expected—which is why no one else bothered to try."

"At that time, you were on Earth to get your Master's certificate," the machine said. "Otherwise you might never have heard. And, while Earth's data-processing and news facilities are unsurpassed in known space, they are nonetheless so overloaded that details which seem of scant importance are not sent in. Among those filtered-out items was the one presently under consideration.

"It was by chance that Serendipity, Inc. obtained a full account several years later. A Lemminkainenite captain who had been on that voyage tendered the data in exchange for a reduction of fee for his own inquiries. Actually, he brought information and records pertaining to numerous explorations he had made. This one happened to be among them. No significance was noticed until the present moment, when your appearance stimulated a detailed study of the fact in question."

The man's pulse quickened. His hands clenched on the chair arms.

"Preliminary to your perusal of

the transcript, a verbal summary is herewith offered," whistled the oracle. "A rogue planet was found to be approaching the star Beta Crucis. It will not be captured, but the hyperbola of its orbit is narrow and it will come within an astronomical unit."

The screen darkened. Space and the stars leaped forth. One among them burned a steady steel blue. It waxed as the ship that had taken the pictures ran closer.

"Beta Crucis lies approximately south of Sol at an approximate distance of two hundred and four light-years." The dry recital, in that windful tone, seemed to make cold strike out of the moving view. "It is of type B_1, with a mass of approximately six, radius four, luminosity eight hundred and fifty times Sol's. It is quite young, and its total residence time on the main sequence will be on the order of a hundred million standard years."

The scene shifted. A streak of light crossed the wintry stellar background. Falkayn recognized the technique. If you cruise rapidly along two or three orthogonal axes, recording photomultipliers will pick up comparatively nearby objects like planets, by their apparent motion, and their location can be triangulated.

"In this instance, only a single object was detected, and that at a considerable distance out," said the machine. "Since it represented the lone case of passage that the expedition found, closer observation was made."

The picture jumped to a strip taken from orbit. Against the stars hung a globe. On one side it was dark, constellations lifting over its airless horizon as the ship moved. On the other side it shimmered wan bluish white. Irregular markings were visible, where the steeper uplands reared naked. But most of the surface was altogether featureless.

Falkayn shivered. *Cryosphere,* he thought.

This world had condensed, sunless, from a minor knot in some primordial nebula. Dust, gravel, stones, meteoroids rained together during multiple megayears; and in the end, a solitary planet moved off between the stars. Infall had released energy; now radioactivity did, and the gravitational compression of matter into denser allotropes. Earthquakes shook the newborn sphere; volcanoes spouted forth gas, water vapor, carbon dioxide, methane, ammonia, cyanide, hydrogen sulfide . . . the same which had finally evolved into Earth's air and oceans.

But here was no sun to warm, irradiate, start the chemical cookery that might at last yield life. Here were darkness and the deep, and a cold near absolute zero.

As the planet lost heat, its oceans froze. Later, one by one, the gases of the air fell out solid upon those immense glaciers, a Fimbul blizzard

that may have gone for centuries. In a sheath of ice—ice perhaps older than Earth herself—the planet drifted barren, empty, nameless, meaningless, through time to no harbor except time's end.

Until—

"The mass and diameter are slightly greater than terrestrial, the gross density somewhat less," said the brain that thought without being aware. "Details may be found in the transcript, to the extent that they were ascertained. They indicate that the body is quite ancient. No unstable atoms remain in appreciable quantity, apart from a few of the longest half-life.

"A landing party made a brief visit."

The view jumped again. Through the camera port of a gig, Falkayn saw bleakness rush toward him. Beta Crucis rose. Even in the picture, it was too savagely brilliant to look near. But it was nonetheless a mere point—distant, distant; for all its unholy radiance, it threw less light than Sol does on Earth.

That was ample, however, reflected off stiffened air and rigid seas. Falkayn must squint against dazzle to study a ground-level scene.

That ground was a plain, flat to the horizon save where the spaceboat and crew had troubled it. A mountain range thrust above the world's rim, dark raw stone streaked with white. The gig cast a blue shadow across diamond snow-glitter, under the star-crowded black sky. Some Lemminkainenites moved about, testing and taking samples. Their otter shapes were less graceful than ordinarily, hampered by the thick insulating soles that protected them and the materials of their spacesuits from the heat sink that such an environment is. Falkayn could imagine what hush enclosed them, scarcely touched by radio voices or the seething of cosmic interference.

"They discovered nothing they considered to be of value," said the computer. "While the planet undoubtedly has mineral wealth, this lay too far under the cryosphere to be worth extracting. Approaching Beta Crucis, solidified material would begin to sublime, melt, or vaporize. But years must pass until the planet came sufficiently near for this effect to be noticeable."

Unconsciously, Falkayn nodded. Consider the air and oceans of an entire world, chilled to equilibrium with interstellar space. What a Dante's hell of energy you'd need to pour in before you observed so much as a little steam off the crust!

The machine continued: "While periastron passage would be accompanied by major geological transformations, there was no reason to suppose that any new order of natural phenomena would be disclosed. The course of events was predictable on the basis of the known properties of matter. The cryosphere would become atmosphere and hydrosphere.

Though this must cause violent readjustments, the process would be spectacular rather than fundamentally enlightening—or profitable; and members of the dominant culture on Lemminkainen do not enjoy watching catastrophes. Afterward the planet would recede. In time, the cryosphere would re-form. Nothing basic would have happened.

"Accordingly, the expedition reported what it had found, as a mildly interesting discovery on an otherwise disappointing cruise. Given little emphasis, the data were filed and forgotten. The negative report that reached Earth did not include what appeared to be an incidental."

Falkayn smote the desk. It thrummed within him. *By God,* he thought, *the Lemminkainenites for sure don't understand us humans.* We *won't let the thawing of an ice world go unwatched!*

Briefly, fantasies danced in his mind. Suppose you had a globe like that, suddenly brought to a livable temperature. The air would be poisonous, the land raw rock . . . but that could be changed. You could make your own kingdom—

No. Quite aside from economics —a lot cheaper to find uninhabited planets with life already on them— there were the dull truths of physical reality. Men can alter a world, or ruin one; but they cannot move it one centimeter off its ordained course. That requires energies of literally cosmic magnitude.

So you couldn't ease this planet into a suitable orbit around Beta Crucis. It must continue its endless wanderings. It would not freeze again at once. Passage close to a blue giant would pour in unbelievable quantities of heat, which radiation alone is slow to shed. But the twilight would fall within years; the dark within decades; the Cold and the Doom within centuries.

The screen showed a last glimpse of the unnamed sphere, dwindling as the spaceship departed. It blanked. Falkayn sat shaken by awe.

He heard himself say, like a stranger, with a flippancy that was self-defensive: "Are you proposing I organize excursions to watch this object swing by the star? A pyrotechnic sight, I'm sure. But how do I get an exclusive franchise?"

The machine said: "Further study will be required. For example, it will be needful to know whether the entire cryosphere is going to become fluid. Indeed, the very orbit must be ascertained with more precision than now exists. Nevertheless, it does appear that this planet may afford a site of unprecedented value to industry. That did not occur to the Lemminkainenites, whose culture lacks a dynamic expansionism. But a correlation has just been made here with the fact that, while heavy isotopes are much in demand, their production has been severely limited because of the heat energy and lethal waste entailed. Presumably this is a good place on which to build such facilities."

The idea hit Falkayn in the belly, then soared to his head like champagne bubbles. The money involved wasn't what brought him to his feet shouting. Money was always pleasant to have; but he could get enough for his needs and greeds with less effort. Sheer instinct roused him. He was abruptly a Pleistocene hunter again, on the track of a mammoth.

"Judas!" he yelled. *"Yes!"*

"Because of the commercial potentialities, secrecy would be advantageous at the present stage," said the voice which knew no glories. "It is suggested that your employer pay the fee required to place this matter under temporary seal of secrecy. You may discuss that with Freelady Beldaniel upon leaving today, after which you are urged to contact Freeman van Rijn." It paused, for a billion nanoseconds; what new datum, suddenly noticed, was it weaving in? "For reasons that may not be given, you are most strongly advised to refrain from letting out the truth to anyone whatsoever before you have left Luna. At present, since you are here, it is suggested that the matter be explored further, verbally, in the hope that lines of association will open to more data that are relevant."

Emerging, two hours later, Falkayn stopped before the woman's desk. *"Whew!"* he said, triumphant and weary.

She smiled back. "I trust you had a successful time?"

"And then some. Uh, I've got a thing or two to take up with you."

"Please sit down." Thea Beldaniel leaned forward. Her gaze grew very bright and level. "While you were in there, Captain Falkayn, I used another outlet to get from the bank what data it has about you. Only what is on public record, of course, and only in the hope of serving you better. It is quite astonishing what you have accomplished."

So it is, Falkayn agreed. "Thank you," he said.

"The computers do not do all the computing in this place." By heaven, she did have a little humor! "The idea occurred to me that you and we might cooperate in certain ways, to great mutual advantage. I wonder if we could talk about that, too?"

IV

From Lunograd, the Hotel Universe challenges a galaxy: "No oxygen-breathing sophont exists for whom we cannot provide suitable accommodation. Unless every room is already occupied, we will furnish any such visitor with what is necessary for health, safety, and satisfaction. If equipment and supplies on hand are insufficient, we will obtain them upon reasonable advance notice and payment of a reasonable extra charge. If we fail to meet the terms of this guarantee, we will present the disappointed guest with the sum of one million credits of the Solar Commonwealth."

Many attempts are made to collect, by spacemen in collusion with the most outlandish beings they can find. Twice the cost of fulfilling the promise has exceeded the megacredit. (In one case, research and development were needed for the molecular synthesis of certain dietary materials; in the other case, the management had to fetch a symbiotic organism from the visitor's home planet.) But the publicity is well worth it. Human tourists especially will pay high prices in order to stay here and feel cosmopolitan.

Chee Lan afforded no problems. The most advanced trade routes on her world—"trade route" comes nearer to translating the concept than does "nation"—have been in close contact with man since the first expedition to O_2 Eridani A II discovered them. Increasing numbers of Cynthians arrive at the Solar System as travelers, merchants, delegates, specialists, students. Some go on to roam space professionally. Chee was given a standardized suite.

"No, I am not comfortable," she had snapped when Falkayn called to ask if she was. "But I shouldn't have expected them to produce a decent environment for me, when they can't even get the name of my planet right."

"Well, true, you call it Lifehome-under-Sky," Falkayn answered blandly, "but over on the next continent they—"

"I know, I know! That's exactly the trouble. Those klongs forget Tah-chih-chien-pi is a complete world, with geography and seasons. They've booked me into the next continent, and it's bloody cold!"

"So ring up and complain," Falkayn said. "You're good at that."

Chee sputtered but later followed his advice.

An Earthling would probably not have noticed the adjustments that were made. He would have continued to be aware simply of a gravity 0.8 standard; a reddish-orange illumination that varied through a fifty-five-hour diurnal-nocturnal period; hot wet air, full of musky odors; pots of giant flowers scattered about the floor, a vine-draped tree, a criss-crossing set of bars used not merely for exercise but for getting from place to place within the rooms. (The popular impression is wrong, that Cynthians are arboreal in the sense that monkeys are. But they have adapted and adjusted to the interwoven branches of their endless forests, and often prefer these to the ground.) The Earthling would have observed that the animated picture which gave the illusion of a window showed jungle, opening on a savannah where stood the delicate buildings of a caravanserai. He would have paid attention to the scattered books and the half-finished clay sculpture with which Chee had been amusing herself while she waited for Falkayn to carry out the business that brought the team here.

At this moment, he would have

seen her turn from the phone, where the man's image had just faded, and squat in arch-backed tension.

Tai Tu, with whom she had also been amusing herself, tried to break the thickening silence: "I take it that was one of your partners?" He knew Espanish, not Anglic.

"Yes, do take it," Chee clipped. "Take it far away."

"I beg your gracious elucidation?"

"Get out," Chee said. "I've got thinking to do."

Tai Tu gasped and goggled at her.

The hypothetical observer from Earth would probably have called her cute, or actually beautiful; many of his species did. To Tai Tu, she was desirable, fascinating, and more than a little terrifying.

When erect, she stood some ninety centimeters tall, and her bushy tail curled upward a full half that length. Lustrous white angora fur covered her otherwise naked form. A long-legged biped, she nonetheless had five prehensile toes on either foot, and walked digitigrade. The arms, scarcely less long and muscular, ended in hands that each possessed five four-jointed, rosy-nailed fingers and a thumb. The round, pointed-eared head carried a short-muzzled face whose flat nose and dainty mouth were fringed with whiskers like a cat's. Above, the enormous emerald eyes were emphasized by a mask of the same blue-gray hue as feet, hands, and ears. Though hirsute, viviparous, and homeothermic, she was not a mammal. The young of her race eat flesh from birth, using their lips to suck out the blood.

Tai Tu was smaller and a less aggressive carnivore. During their evolution, male Cynthians were never required to carry the cubs through the trees and fight for them. He had been flattered when Chee Lan told him—a humble visiting professor at Lomonosov University, whereas she was a xenologist in the service of Nicholas van Rijn—to move in with her.

Still, he had his pride. "I cannot accept this treatment," he said.

Chee bared her fangs. They were white and very sharp. She jerked her tail at the door. "Out," she said. "And stay."

Tai Tu sighed, packed his belongings and returned to his former quarters.

Chee sat for a while alone, scowling ever more blackly. At last she punched a number on the phone. There was no response. "Damnation, I know you're in!" she yelled. The screen remained blank. Presently she was hopping up and down with rage. "You and your stupid Buddhist meditations!" After a hundred or so rings, she snapped the switch and went out the air lock.

The corridors beyond were Earth-conditioned. She adjusted to the change without effort. Of necessity, members of the same space team have much the same biological requirements. The slideways were too

slow for her. She bounded along them. En route, she bowled over His Excellency, the Ambassador of the Epopoian Empire. He cawed his indignation. She flung such a word back over her shoulder that His Excellency's beak hung open and he lay voiceless where he had fallen for three minutes by the clock.

Meanwhile Chee reached the entrance to Adzel's single room. She leaned on the doorchime button. It produced no results. He must really be out of this continuum. She punched dots and dashes, emergency code signals. *SOS. Help. Engine failure. Collision. Shipwreck. Mutiny. Radiation. Famine. Plague. War. Supernova.* That untranced him. He activated the valves and she cycled through the lock. The quick change of pressure made her eardrums hurt.

"Dear me," rumbled his mild basso profundo, "what language. I am afraid that you are further from attaining enlightenment than I had estimated."

Chee looked up toward Adzel's countenance, and up, and up. A weight of two and a half Terran G's, the hellish white blaze of a simulated F-type sun, the loudness of every sound in this dense, parched, thunder-smelling atmosphere, struck her and quelled her. She crawled under a table for shelter. The chamber's austerity was unrelieved by a film view of illimitable windy plains on that planet which men call Woden, or by the mandala that Adzel had hung from the ceiling, or the scroll of Mahayana text he had posted on a wall.

"I trust your news is of sufficient importance to justify interrupting me at my exercises," he went on, as severely as possible for him.

Chee paused, subdued. "I don't know," she confessed. "But it concerns us."

Adzel composed himself to listen.

She studied him for a moment, trying to anticipate his response to what she had to say. No doubt he would feel she was overreacting. And maybe that was right. But she'd be flensed and gutted if she'd admit it to him!

He bulked above her. With the powerful tail, his centauroid body had a length of four and a half meters and mass exceeding a ton. A barndoor-broad torso, carrying a pair of arms and quadridigital hands in proportion, lifted the head more than two meters above the four cloven hoofs, at the end of a longish neck. That head was almost crocodilian, the snout bearing flared nostrils and an alarming array of teeth. The external ears were solid bony material, like the row of triangular dorsal plates which made a serration from the top of his pate to the end of his tail. Yet the skull bulged far backward to hold a considerable brain, and beneath overhanging brow ridges, his eyes were large and brown and rather wistful. Scutes armored his throat and belly, scales the rest of him. Yet they were

a lovely, shimmering dark-green on top, shading to gold underneath. He was respected in his field of planetology, or had been before he quit academe to take sordid commercial employment. And in some ways, he was biologically closer to human than Chee. Besides being warm-blooded and omnivorous, he came of a species whose females give live birth and suckle their infants.

"Dave phoned me," Chee said. Feeling a bit more her usual self, she added with a snort: "He finally dragged himself away for a few hours from that hussy he's been wasting our time on."

"And went to Serendipity, Inc. as per plan? Excellent, excellent. I hope material of interest was revealed to him." Adzel's rubbery lips formed League Latin rather than the Anglic Chee was using, in order to stay in practice.

"He was certainly skyhooting excited about it," the Cynthian replied. "But he wouldn't mention details."

"I should think not, over an unsealed circuit." Adzel's tone grew disapproving, "In this town, I understand, every tenth being is somebody's spy."

"I mean he wouldn't come here either, or have us come to his hotel, and talk," Chee said. "The computer warned him against it, without giving a reason."

The Wodenite rubbed his jaw. "Now that is curious. Are not these quarters proof against snooping devices?"

"They ought to be, at the rates we pay. But maybe a new kind of bug has come along, and the machine's learned about it confidentially. You know SI's policy on that, don't you? Dave wants us to radio the home office for more money and buy a 'restricted' tag for whatever he was told today. He says once we're back on Earth, he can safely chatter."

"Why not beforehand? If he cannot leave Luna immediately, at least we could take a jaunt in our ship with him. That won't be gimmicked, not while Muddlehead is active."

"Listen, you glorified bulligator, I can see the obvious quicker than you, including the obvious fact that of course I'd suggest the ship. But he said no, not right away, at least. You see, one of the partners in SI invited him to spend a while at that castle of theirs."

"Strange. I had heard they never entertain guests."

"For once you heard right. But he said this anthro wants to discuss business with him, wouldn't tell him what but hinted at large profits. The chance looked too good to miss. Only, the invitation was for immediately. He'd just time to duck back to his place for a clean shirt and a toothbrush."

"Will Freeman van Rijn's affair wait?" Adzel asked.

"Presumably," Chee said. "At any rate, Dave wasn't sure the socializing mood of the partners would last if he stalled them. By every ac-

count, their souls consist of printed circuits. If nothing else comes of visiting them at home, he felt this was a unique chance for an inside view of their outfit."

"Indeed," Adzel nodded. "Indeed. David acted quite correctly, when the opportunity concerns an organization so powerful and enigmatic. I do not see what makes you feel any urgency. We two shall simply have to spend a few more days here."

Chee bristled. "I don't have your stone-brained calm. The computer put Dave onto something big. I mean astronomical—money by the planetful. I could tell that by his manner. Suppose his hosts aim to do him in, for the sake of getting at that thing themselves?"

"Now, now, my little friend," Adzel chided. "Serendipity, Inc. does not meddle in the business of its clients. It does not reveal their secrets. As a rule, the partners do not even know what those secrets are. They have no ties to other organizations. Not only repeated private investigations, but the experience of years has confirmed this. If ever they had violated their own announced ethic, ever shown special favor or prejudice, the repercussions would soon have laid the deed bare. No other member of the Polesotechnic League—no group throughout the whole of known space—has proven itself more trustworthy."

"Always a first time, sonny."

"Well, but think. If the strain is not excessive," Adzel said with rare tartness. "For the sake of argument, let us make the ridiculous assumption that Serendipity did in fact eavesdrop on David's conference with the computer, and has in fact decided to break its word never to seize private advantage.

"It remains bound by the covenant of the League, a covenant which was established and is enforced for good pragmatic reasons. Imprisonment, murder, torture, drugs, brainscrub, every kind of direct attack upon the psychobiological integrity of the individual, is banned. The consequences of transgression are atavistically severe. As the saying goes on Earth, the game is not worth the lantern. Hence the resources of espionage, temptation, and coercion are limited. David is immune to bribery and blackmail. He will reveal nothing to hypothetical surveillance, nor will he fall into conversational traps. If female bait is dangled before him, he will delightedly accept it without touching the fishhook. Has he not already—"

At that point, in a coincidence too outrageous for anything other than real life, the phone buzzed. Adzel pressed the Accept button. The image of Falkayn's latest girl friend appeared. His partners recognized her; they had both met her, briefly, and were too experienced to believe the cliché that all humans look alike.

"Good evenwatch, Freelady," Adzel said. "May I be of assistance?"

Her expression was unhappy, her tone unsteady. "I apologize for disturbing you," she said, "but I'm trying to get hold of Da . . . Captain Falkayn. He's not come back. Do you know—?"

"He isn't here either, I am sorry to say."

"He promised he'd meet me . . . before now . . . and he hasn't, and"—Veronica swallowed—"I'm worried."

"A rather urgent matter arose. He lacked time in which to contact you," Adzel lied gallantly. "I was asked to convey his sincere regrets."

Her smile was forlorn. "Was the urgent matter blonde or brunette?"

"Neither, Freelady. I assure you it involves *his* profession. He may be gone for a few standard days. Shall I remind him to phone you upon his return?"

"I'd be so grateful if you would, sir." She twisted her fingers together. "Th-thank you."

Adzel blanked the screen. "I am reluctant to state this of a friend," he murmured, "but occasionally David impresses me as being rather heartless in certain respects."

"Huh!" Chee said. "That creature's only afraid he'll get away without spilling information to her."

"I doubt it. Oh, I grant you such a motive has been present, and probably continues in some degree. But her distress looks genuine, insofar as I can read human behavior. She appears to have conceived a personal affection for him." Adzel made a commiserating noise. "How much more conducive to serenity is a fixed rutting season like mine."

Chee had been calmed by the interruption. Also, her wish to get out of this oven that Adzel called home grew stronger each minute. "That is a good-looking specimen, by Dave's standards," she said. "No wonder he delayed getting down to work. And I don't suppose he'll be overly slow about returning to her, until he's ready to haul gravs off Luna altogether. Maybe we needn't really fret on his account."

"I trust not," Adzel said.

V

By flitter, the castle in the Alps was not many minutes from Lunograd. But those were terrible kilometers that lay between; mountaineering parties never ventured so far. And a wide reach of land and sky around the site was forbidden—patrolled by armed men, guarded by robot-gun emplacements—with that baronial absoluteness the great may claim in a civilization which exalts the rights of privacy and property.

A nonhuman labor force had built it, imported for the purpose from a dozen remote planets and afterward returned, totally dispersed. For a while, local resentment combined with curiosity to yield fantastic rumors. Telescopic pictures were taken from orbit, and published, until half the Commonwealth knew about gaunt black towers, sheer

walls, comings and goings of ships at a special spaceport, in the Lunar mountains.

But gossip faded with interest. Large estates were common enough among the lords of the Polesotechnic League—most of whom carried on in a far more colorful fashion than these recluses. Furtiveness and concealment were a frequent part of normal business practice. For years, now, Serendipity, Inc. had been taken for granted.

To be sure, Falkayn thought, *if the society news learns I've been chauffeured out here, actually gotten inside*—a sour grin tugged at his mouth—*wouldn't it be cruel to tell the poor dears the truth?*

The scenery was spectacular, from this upper-level room where he stood. A wide viewport showed the downward sweep of rock, crags, cliffs, talus slopes, to a gash of blackness. Opposite that valley, and on either side of the castle plateau, peaks lifted raw into the constellations. Earth hung low in the south, nearly full, nearly blinding in its brilliance; interminable shadows surrounded the bluish spotlight that it cast.

But you could watch the same, or better, from a number of lodges: where there would be merriment, music, decoration, decent food and decent talk. The meal he had just finished, shortly after his arrival, had been as grimly functional as what he saw of the many big chambers. Conversation, with the four partners who were present, had consisted of banalities punctuated by silences. He excused himself as soon as he could. That was obviously sooner than they wished, but he knew the glib phrases and they didn't.

Only in the office had he been offered a cigar. He decided that was because the gesture was programmed into the kind of lounger they had bought. He reached inside his tunic for pipe and tobacco. Kim Yoon-Kun, a small neat expressionless man in a pajama suit that managed to resemble a uniform, had followed him. "We don't mind if you smoke at the table, Captain Falkayn," he said, "though none of us practice the . . . amusement."

"Ah, but I mind," Falkayn answered. "I was strictly raised to believe that pipes are not allowed in dining areas. At the same time, I crave a puff. Please bear with me."

"Of course," said the accented voice. "You are our guest. Our sole regret is that Freeman Latimer and Freelady Beldaniel cannot be present."

Odd, Falkayn thought, not for the first time. *Hugh Latimer leaves his wife here, and goes off with Thea's sister.* Mentally, he shrugged. Their pairing arrangements were their own affair—if they had any. By every account, Latimer was as dry a stick as Kim, despite being an accomplished space pilot. The wife, like Anastasia Herrera and no doubt the sister of Thea, succeeded in being more old-maidish than the latter.

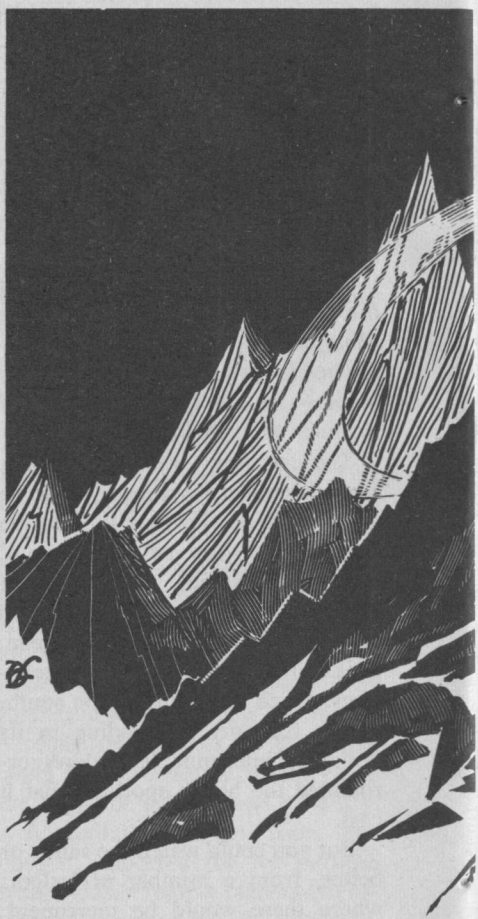
Their attempt to make small talk with the visitor would have been pathetic had it been less dogged.

What matters, Falkayn thought, *is getting out of here, back to town and some honest fun.*

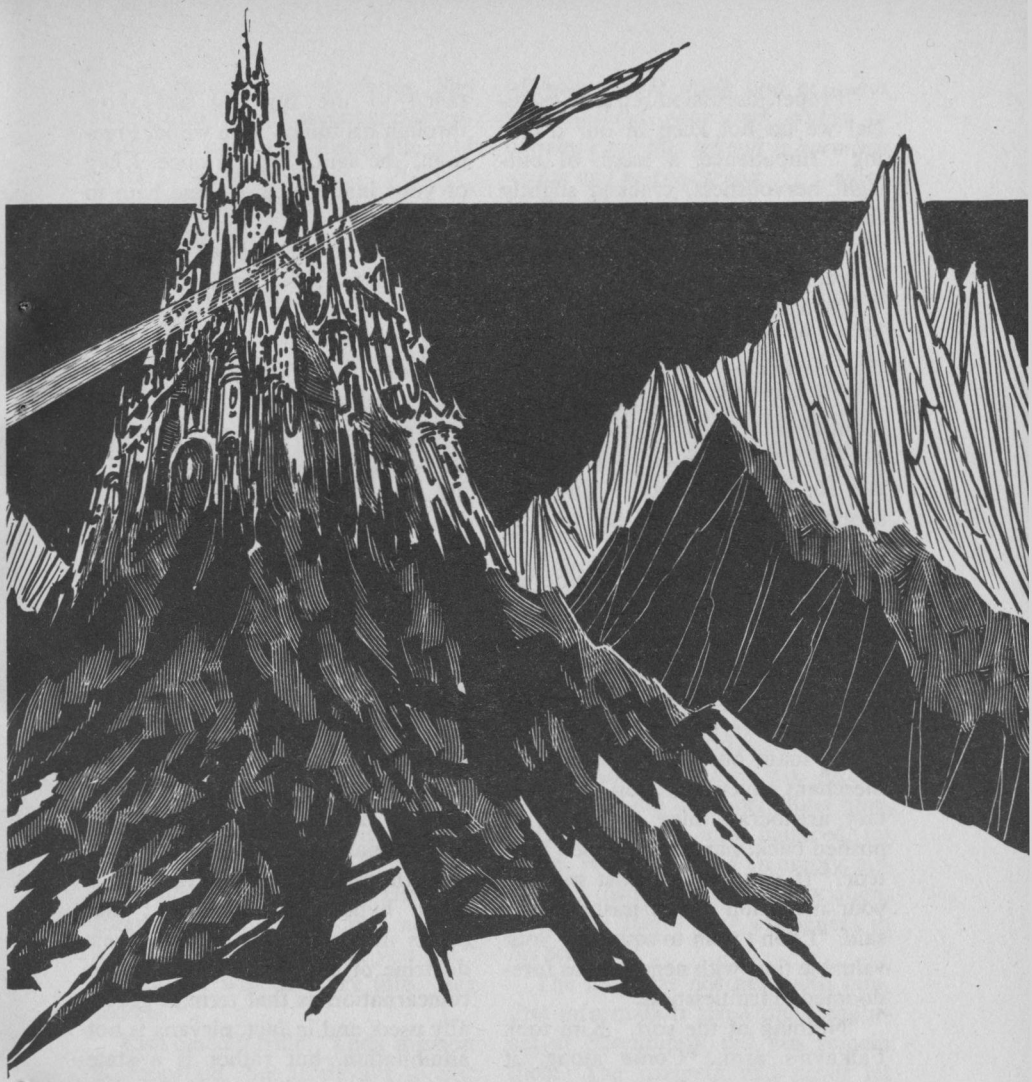
"This is not an ideal room for you, though," Kim said with a starched smile. "You observe how sparsely furnished it is. We are six people and a few nonhuman servants. We built this place large with a view to eventual expansion, bringing in more associates, perhaps spouses and children in time, if that proves feasible. But as yet we, ah, rattle around. I believe you and we should converse in a more amenable place. The others are already going there. We can serve coffee and brandy if you wish. May I conduct you?"

"Thanks," Falkayn said. The doubtless rehearsed speech did not quench his hope of soon being able to leave what had proven to be a citadel of boredom. "We can start talking business?"

"Why—" Startled, Kim searched for words. "It was not planned for this evenwatch. Is not the custom that social activity precede . . . that one get acquainted? We assume you will stay with us for several days, at least. Some interesting local excursions are possible from here, for example. And we will enjoy hearing you relate your adventures in distant parts of space."



"You're very kind," Falkayn said, "but I'm afraid I haven't time."



"Did you not tell the younger Freelady Beldaniel—"

"I was mistaken. I checked with my partners, and they told me my boss had started to sweat rivets. Why don't you sketch out your proposition right away, to help me decide how long he might let me stay?"

"Proper discussion requires material we do not keep in our dwelling." Impatience, a touch of outright nervousness, cracked slightly the mask that was Kim Yoon-Kun. "But come, we can lay your suggestion before the others."

The knowledge hit Falkayn: *He's almighty anxious to get me out of this particular room, isn't he?* "Do you mean we'll discuss the commencement of discussions?" he hedged. "That's a funny one. I didn't ask for documentation. Can't you simply explain in a general way what you're after?"

"Follow me." Kim's tone jittered. "We have problems of security, the preservation of confidences, that must be dealt with in advance."

Falkayn began enjoying himself. He was ordinarily a genial, obliging young man; but those who push a merchant adventurer, son of a military aristocrat, must expect to be pushed back, hard. He donned hauteur. "If you do not trust me, sir, your invitation was a mistake," he said. "I don't wish to squander your valuable time with negotiations foredoomed to fruitlessness."

"Nothing of the sort." Kim took Falkayn's arm. "Come along, if you please, and all shall be made clear."

Falkayn stayed put. He was stronger and heavier; and the gravity field was set at about Earth standard, the usual practice in residences on dwarf worlds where muscles would otherwise atrophy. His resistance to the tug did not show through his tunic. "In a while, Freeman," he said. "Not at once, I beg of your indulgence. I came here to meditate."

Kim let go and stepped back. The black eyes grew still narrower. "Your dossier does not indicate any religious affiliation," he said slowly.

"Dossier?" Falkayn raised his brows with ostentation.

"The integrated file of material our computer has about you—nothing except what is on public record," Kim said in haste. "Only in order that our company may serve you better."

"I see. Well, you're right, except that one of my shipmates is a Buddhist—converted years ago, while studying on Earth—and he's gotten me interested. Besides," Falkayn said, warming up, "it's quite a semantic quibble whether the purer sects of Buddhism are religions, in the ordinary sense. Certainly they are agnostic with respect to gods or other hypothetical animistic elements in the reality-complex; their doctrine of karma does not require reincarnation as that term is generally used; and in fact, nirvana is not annihilation, but rather is a state that may be achieved in this life and consists of—"

And then it was too late for Kim.

The spaceship slanted across the view, a lean cylinder that glowed under Earthlight and shimmered

within the driving gravfields. She swung into vertical ascent and dwindled from sight until lost in the cold of the Milky Way.

"Well," Falkayn murmured. "Well, well."

He glanced at Kim. "I suppose Latimer and Beldaniel are crewing her?" he said.

"A routine trip," Kim answered, fists knotted at sides.

"Frankly, sir, I doubt that." Falkayn remembered the pipe he held and began to stuff it. "I know hyperdrive craft when I see them. They are not used for interplanetary shuttling. Why tie up that much capital when a cheaper vessel will do? For the same reason, common carriers are employed interstellar wherever practical. And full partners in a big company don't make long voyages as a matter of routine. Clearly, this is an urgent job."

And you didn't want me to know, he added unspoken. His muscles grew taut. *Why not?*

Wrath glittered at him. He measured out a chuckle. "You needn't have worried about me, if you did," he said. "I wouldn't pry into your secrets."

Kim eased a trifle. "Their mission is important, but irrelevant to our business with you," he said.

Is it? Falkayn thought. *Why didn't you tell me at the beginning, then, instead of letting me grow suspicious? I believe I know why. You're so isolated from the human mainstream, so untrained in the nuances of how people think and act, that you doubted your own ability to convince me this takeoff is harmless as far as I'm concerned . . . when it probably isn't!*

Again Kim went so far as to smile. "But pardon me, Captain Falkayn. We have no desire to intrude upon your religious practices. Please remain, undisturbed, as long as you wish. When you desire company, you may employ the intercom yonder, and one of us will come guide you to the other room." He bowed. "May you have a pleasant spiritual experience."

Touché! Falkayn thought, staring after the man's back. *Since the damage has been done, he turns my yarn right around on me—his aim being to keep me here for some time—but what's the purpose of it all?*

He lit his pipe and made volcano clouds, strode to and fro, looked blindly out the viewport, flung himself into chairs and bounced up again. Was he nursing an empty, automatic distrust of the merely alien, or did he feel a real wrongness in his bones?

The idea was not new with him, that information given the computers at Serendipity did not remain there. The partners had never let those circuits be traced by an independent investigator. They could easily have installed means for playing back an item or listening in on a conversation. They could instruct a machine to slant its advice as they desired. And—cosmos—once faith

in them had developed, once the masters of the League started making full use of their service, what a spy they had! What a saboteur!

Nevertheless the fact stood: not one of those wary, wily enterprisers had ever found the least grounds for believing that Serendipity was in unfair collaboration with any of his rivals, or attempting to sneak in on anyone's operations, not even to the extent of basing investments on advance knowledge.

Could be they've decided to change their policy. That planet of mine could tempt the most virtuous into claimjumping . . . But sunder it, that doesn't feel right either. Six personalities as rigid as these don't switch from information broker to pirate on an hour's notice. They don't*!*

Falkayn checked his watch. Thirty minutes had passed, sufficient time for his pretense. (Which probably wasn't believed anyway.) He strode to the intercom, found it set for station Number Fourteen, flipped the switch and said: "I'm done now."

Scarcely had he turned when Thea Beldaniel was in the doorway. "That was quick!" he exclaimed.

"I happened to be near. The message was relayed to me."

Or were you waiting this whole while?

She approached, halting when they both reached the viewport. Her walk was more graceful, in a high-necked long-sleeved gown, and her smile more convincingly warm, than before. A gawkiness remained, and she poised stiffly after she had entered his arm's length. But he felt himself attracted for some odd reason. Maybe she was a challenge, or maybe she was just a well-formed animal.

He knocked out his pipe. "I hope I didn't give offense," he said.

"Not in the least. I quite sympathize. The outlook inspires you, does it not?" She gestured at a control panel. Lights dimmed; the eldritch moonscape stood forth before their vision.

No pressure on me now, Falkayn thought cynically. *Contrariwise. The longer I dawdle before reporting to Old Nick, the happier they'll be. Well, no objections from my side for the nonce. This has suddenly gotten interesting. I have a lot of discreet curiosity to satisfy.*

"Glory out there," she whispered.

He regarded her. Earthlight lifted her profile from shadow and poured softly downward. Stars glimmered in her eyes. She looked into their wintry myriads with a kind of hunger.

He blurted, caught by an abrupt compassion that surprised him: "You feel at home in space, don't you?"

"I can't be sure." Still she gazed skyward. "Not here, I confess. Never here. You must forgive us if we are poor company. It comes from shyness, ignorance . . . fear, I sup-

pose. We live alone and work with data—abstract symbols—because we are fit to do nothing else."

Falkayn didn't know why she should reveal herself to him. But wine had been served at dinner. The etiquette book could have told them this was expected, and the drink could have gone to her inexperienced head.

"I'd say you've done fine, beginning as complete strangers," he told her. "You did, am I right? Strangers to your whole species?"

"Yes." She sighed. "You may as well know. We declined to state our background originally because, oh, we couldn't foresee what the reaction might be. Later, when we were more familiar with this culture, we had no reason to tell; people had stopped asking, and we were set in our asocial ways. Besides, we didn't want personal publicity. Nor do we now." She glanced at him. In this blue elflight, the crisp middle-aged businesswoman had become a young girl again, who asked for his mercy. "You won't speak . . . to the news . . . will you?"

"On my honor," he said, and meant it.

"The story is simple, really," said her muted voice. "A ship, bound from one of the colonized planets in search of her own world. I understand those aboard left because of a political dispute; and yet I don't understand. The whole thing seems utterly meaningless. Why should rational beings quarrel about— No matter. Families sold everything they had, pooled the money, bought and outfitted a large ship with the most complete and modern robotic gear available. And they departed."

"Into the complete unknown?" Falkayn asked, incredulous. "Not one preliminary scouting expedition?"

"The planets are many where men can live. They were sure they would find one. They wanted to leave no hint to their enemies where it was."

"But . . . I mean, they must have known how tricky a new world can be . . . tricks of biochemistry, disease, weather, a million unpredictable tricks and half of them lethal if you aren't on your guard all—"

"I said this was a large, fully stocked, fully equipped vessel," she retorted. The sharpness left her as she went on: "They were prepared to wait in orbit while tests proceeded. That was well for us. You see, en route the radiation screens broke down in a bad sector. Apart from the nursery, where we infants were, which had an auxiliary generator, every part of the ship got a fatal dose. The people might have been saved in a hospital, but they could never reach one in time, especially since the autopilot systems were damaged, too. Supportive treatment kept them functional barely long enough to fix the screens and program some robots. Then they died. The machines cared for us

children, raised us, in a loveless mechanical fashion. They educated those who survived—willy-nilly, a hodgepodge of mainly technical information crammed into our brains. We didn't mind that too much, however. The ship was such a barren environment that any distractions were welcome. We had nothing else except each other.

"Our ages ranged from twelve to seventeen when we were found. The vessel had kept going under low hyperdrive, in the hope she would finally pass within detection range of somebody. The somebodies proved to be nonhuman. But they were kindly, did what they were able for us. They were too late, of course, for the shaping of normal personalities. We stayed with our rescuers, on their planet, for several years.

"Never mind where," she added quickly. "They know about the League—there have been occasional brief encounters—but their leaders don't want an ancient civilization corrupted by exposure to your cannibal capitalism. They mind their own lives and avoid drawing attention to themselves.

"But the physical environment was not good for us. Besides, the feeling grew that we should attempt to rejoin our race. What they learned from our ship had advanced our hosts technologically in several fields. As a fair exchange—they have an unbendable moral code—they helped us get a start, first with a valuable cargo of metal and later with the computer units we decided we could use. Also, they are glad to have friends who are influential in the League; sooner or later, increased contact is unavoidable. And that," Thea Beldaniel finished, "is the story behind Serendipity, Inc."

Her smile went no deeper than her teeth. Her voice held a tinge of the fanaticism he had met in her office.

Only a tinge? But what she'd been relating here was not operational procedure; it was her life!

Or was it? Parts of the account rang false to him. At a minimum, he'd want more details before he agreed it could be the absolute truth. No doubt some fact was interwoven. But how much, and how significant to his purposes?

"Unique," was all he could think to say.

"I don't ask for pity," she said with a firmness he admired. "Obviously, our existence could have been far worse. I wondered, though, if . . . perhaps"—voice and eyes dropped, fluttered in confusion—"you, who've seen so much, done so much beyond these bounds . . . if you might understand."

"I'd like to try," Falkayn said gently.

"Would you? Can you? I mean . . . suppose you stayed a while . . . and we could talk like this, and do, oh, the little things—the big

things—whatever is human—you might be able to teach me how to be human—"

"Is that what you wanted me for? I'm afraid I—"

"No. No. I realize you . . . you must put your work first. I think—taking what we know, we partners . . . exchange ideas with you—we might develop something really attractive. No harm in exploring each other's notions for a while, is there? What can you lose? And at the same time—you and I—" She half turned. One hand touched his.

For an instant, Falkayn almost said yes. Among the greatest temptations that beset mankind is Pygmalion's. Potentially, she was quite a woman. The rogue could wait.

The rogue! Awareness crashed into him. *They do want to keep me here. It's their whole purpose. They have no definite proposals to make, only vague things they hope will delay me. I must not let them.*

Thea Beldaniel flinched back. "What's wrong?" she cried low. "Are you angry?"

"Eh?" Falkayn gathered his will, laughed and relaxed, picked his pipe off the viewport embrasure and got forth his tobacco pouch. The briar hadn't cooled, but he needed something to do. "No. Certainly not, Freelady. Unless I'm angry at circumstance. You see, I'd like to stay, but I have no choice. I have got to go back tomorrow mornwatch, kicking and screaming maybe, but back."

"You said you could spend several days."

"As I told Freeman Kim, that was before I learned old van Rijn's gnawing his whiskers."

"Have you considered taking a position elsewhere? Serendipity can make you a good offer."

"He has my contract and my fealty," Falkayn rapped. "I'm sorry. I'll be glad to confer with you people this whole nightwatch, if you desire. But then I'm off." He shrugged, though his skin prickled. "And what's your rush? I can return at another date, when I do have leisure."

Her look was desolate. "You cannot be persuaded?"

"I'm afraid not."

"Well . . . follow me to the meeting room, please." She thumbed the intercom and spoke a few words he did not recognize. They went down a high, stone-flagged corridor. Her feet dragged, her head drooped.

Kim met them halfway. He stepped from an intersecting hall with a stun pistol in his grip. "Raise your hands, Captain," he said unemotionally. "You are not leaving soon."

VI

After touching at Djakarta, Delfinburg proceeded by way of Makassar Strait and the Celebes into Pacific waters. At that point, an aircar deposited Nicholas van Rijn. He

did not own the town; to be precise, his rights in it consisted of one house, one dock for a largish ketch, and seventy-three percent of the industry. But mayor and skipper agreed with his suggestion that they change course and pass nearer the Marianas than was usual on their circuit.

"Be good for the poor toilers, visiting those nice islands, *nie*?" he beamed, rubbing hairy hands together. "Could be they might also like a little holiday and come cheer their old honorific uncle when he enters the Micronesia Cup regatta on twenty-fourth of this month. That is, I will if we chance to be by the right place no later than twenty-second noon, and need to lay over a few days. I don't want to be you any bother."

The skipper made a quick calculation. "Yes, sir," he reported, "it so happens we'll arrive on the twenty-first." He signaled for an additional three knots. "And you know, you're right, it would be a good idea to stop a while and clean out the catalyst tanks or something."

"Good, good! You make a poor old lonely man very happy, how much he is in need of rest and recreation and maybe right now a gin-and-tonic to settle his stomach. A lot of settlement to make, hey?" Van Rijn slapped his paunch.

He spent the next week drilling his crew to a degree that would have appalled Captain Bligh. The men didn't really mind—sails dazzling against living, limitless, foam-laced blue across which the sun flung diamond dust; surge, pitch, thrum, hiss at the bows and salt on the lips, while the wind filled lungs with purity—except that he acted hurt when they declined to carouse with him every night. At length he gave them a rest. He wanted them tuned to an exact pitch for the race, not overstrained. Besides, a business operating across two hundred light-years had inevitably accumulated problems requiring his personal attention. He groaned, cursed, and belched most piteously, but the work did not go away.

"Bah! Pox and pestilence! Work! Four-letter Angular-Saxon word! Why must I, who should be having my otium, should at my age be serene and spewing wisdom on younger generations, why must I use up grindstones against my nose? Have I not got a single deputy whose brain is not all thumbs?"

"You could sell out, for more money than you can spend in ten lifetimes," answered his chief secretary, who was of a warrior caste in a tigerish species and thus required to be without fear. "Or you would finish your tasks in half the time if you stopped whining."

"I let my company, that I built from scratches and got maybe millions of what claim to be thinking beings hanging off it, I let that go crunch? Or I sit meek like my mouth won't smelt butter, and not

say pip about vacuum-conscience competitors, subordinates with reverse peristalsis, guilds, brotherhoods, unions, leeches, and—" Van Rijn gathered his breath before shouting the ultimate obscenity—"*bureaucrats?* No, no, old and tired and feeble and lonesome I am, but I wield my sword to the last bullet. We get busy, ha?"

An office had been established for him in an upper-level solarium of his mansion. Beyond the ranked phones, computers, recorders, data retrievers, and other portable business equipment, the view was broad, from one many-tiered unit to the next, of that flotilla which comprised Delfinburg. There was not much overt sign of production. You might notice turbulence around the valves of a minerals-extraction plant, or the shadow traces of submarines herding fish, or the appetizing scents from a factory that turned seaweeds into condiments. But most of the work was interior, camouflaged by hanging gardens, shops, parks, schools, recreation centers. Few sportboats were out; the ocean was choppy today, although you could not have told that blindfolded on these stabilized superbarges.

Van Rijn settled his huge body into a lounger. He was clad only in a sarong and a lei; why not be comfortable while he suffered? "Commence!" he bawled. The machines chattered, regurgitating facts, calculations, assessments, summaries, and proposals. The principal phone screen flickered with the first call, from a haggard man who had newly escaped a war ten parsecs distant. Meanwhile a set of loudspeakers emitted Mozart's Eighth Symphony; a scarcely clothed young woman fetched beer; another lit the master's Trichinopoly cigar; a third set forth a trayful of fresh Danish sandwiches in case he got hungry. She came incautiously near, and he swept her to him with one gorilla arm. She giggled and ran her fingers through the greasy black ringlets that fell to his shoulders.

"What you making fumblydiddles about?" van Rijn barked at the image. "Some piglet of a king burns our plantations, we give troops to his enemies what beat him and make terms allowing us poor sat-upon exploited meeters of inflated payrolls enough tiny profit we can live. *Nie?*" The man objected. Van Rijn's beady eyes popped. He tugged his goatee. His waxed moustaches quivered like horns. "What you mean, no local troops can face his? What you been doing these years, selling them maybe jackstraws for deadly weapons? Hokay, hokay, I authorize you should bring in a division outplanet mercenaries. Try Diomedes. Grand Admiral Delp hyr Orikan, in Drak'ho Fleet, will remember me and maybe spare a few restless young chaps what like adventure and booties. In six months, I hear everything is loverly-

doverly, or you go find yourself a job scrubbing somebody else's latrines. *Tot weerziens!*" He waved his hand and an assistant secretary switched to the next caller. Meanwhile he buried his great hook nose in his tankard, came up snorting and blowing foam, and held out the vessel for another liter.

A nonhuman head appeared in the screen. Van Rijn replied by the same eerie set of whistles and quavers. Afterward, his sloping forehead corrugated with thought, he rumbled, "I hate like taxes admitting it, but that factor is almost competent, him. He settles his present trouble, I think we can knock him up to sector chief, ha?"

"I couldn't follow the discussion," said his chief secretary. "How many languages do you speak, sir?"

"Twenty-thirty bad. Ten-fifteen good. Anglic best of all." Van Rijn dismissed the girl who had been playing with his hair; though friendly meant, his slap to the obvious target as she started off produced a bombshell crack and a wail. "Hu, hu, little chickpea, I am sorry. You go buy that shimmerlyn gown you been wheedling at me about, and maybe tonight we trot out and show you off—you show plenty, shameless way such things is cut, oh, what those bandits charge for a few square centimeters of cloth!" She squealed and scampered away before he changed his mind. He glowered at the other members of his current harem. "Don't you waggle at me, too. You wait your turns to bleed a poor foolish old man out of what he's got left between him and beggary.

"Well, who's next?"

The secretary had crossed the deck to study the phone in person. He turned about. "The agenda's been modified, sir. Direct call, Priority Two."

"Hum. Hum-hum." Van Rijn scratched the pelt that carpeted his chest, set down his beer, reached for a sandwich and engulfed it. "Who we got in these parts now, authoritied for using Priority Two?" He swallowed, choked, and cleared his throat with another half-liter draught. But thereafter he sat quite still, cigar to lips, squinting through the smoke, and said with no fuss whatsoever: "Put them on."

The screen flickered. Transmission was less than perfect, when a scrambled beam must leave a moving spaceship, punch through the atmosphere, and stay locked on the solitary station that could unscramble and relay. Van Rijn identified the control cabin of his pioneer vessel *Muddlin' Through,* Chee Lan in the foreground and Adzel behind her. "You got problems?" he greeted mildly.

The pause was slight but noticeable, while electromagnetic radiation traversed the distance between. "I believe we do," Adzel said. Interference hissed around his words.

"And we cannot initiate corrective measures. I would give much for those machines and flunkies that surround you to have allowed us a direct contact before today."

"I'll talk," Chee said. "You'd blither for an hour." To van Rijn: "Sir, you'll remember we told you, when reporting on Earth, that we'd proceed to Lunograd and look in on Serendipity, Inc." She described Falkayn's visit there and subsequently to the castle. "That was two weeks ago. He hasn't come back yet. One call arrived after three standard days. Not a real talk—a message sent while he knew we'd be asleep. We kept the record, of course. He said not to worry; he was on to what might be the most promising lead of his career, and he might be quite some time following it up. We needn't stay on Luna, he could take a shuttleboat to Earth." Her fur stood out, a wild aureole around her countenance. "It wasn't his style. We had voice and somatic analysis done at a detective agency, using several animations of him from different sources. It's Falkayn, beyond reasonable doubt. But it's *not* his style."

"Playback," van Rijn ordered. "Now. Before you go on." He watched unblinkingly, as the blond young man spoke his piece and signed off. "By damn, you have right, Chee Lan. He should at least grin and ask you give his love to three or four girls."

"We've been pestered by one, for certain," the Cynthian declared. "A spy set on him, who found she couldn't cope with his technique or whatever the deuce he's got. Last call, she actually admitted she'd been on a job, and blubbered she was sorry and she'd never, never, never— You can reconstruct the sequence."

"Play her anyhow." Veronica wept. "*Ja,* a bouncy wench there. Maybe I interview her personal, ho-ho! Somebody got to. Such a chance to get a look inside whoever hired her!" Van Rijn sobered. "What happened next?"

"We fretted," Chee said. "At last even this big lard statue of a saint here decided that enough was too furious much. We marched into the SI office itself and said if we didn't get a more satisfactory explanation, from Dave himself, we'd start disassembling their computers—with a pipe wrench. They quacked about the covenant, not to mention the civil police, but in the end they promised he'd phone us." Grimly: "He did. Here's the record."

The conversation was long. Chee yelled, Adzel expostulated, Falkayn stayed deadpan and unshakable. ". . . I am sorry. You may never guess how sorry I am, old friends. But nobody gets a choice about how the lightning's going to strike him. Thea's my woman, and there's an end on the matter.

". . . We'll probably go a-roving after we get married. I'll be working for SI. But only in a technical

sense. Because what we're really after, what's keeping me here, is something bigger, more fundamental to the whole future, than . . . No. I can't say more. Not yet. But think about making liaison with a genuinely superior race. The race that's been dreamed about for centuries, and never found—the Elders, the Wise Ones, the evolutionary step beyond us—

". . . Yes!" A flicker of irritation. "Naturally SI will refund Solar S & L's wretched payments. Maybe SI should double the sum. Because a fact that I supplied was what started our whole chain of discovery. Though what possible reward could match the service?

". . . Good-bye. Good faring."

Silence dwelt, under the wash of sea waves and whisper of stars. Until van Rijn shook himself, animal fashion, and said: "You took into space and called me today when I got available."

"What else could we do?" Adzel groaned. "David may be under psychocontrol. We suspect it, Chee and I. But we have no proof. For anyone who does not know him personally, the weight of credibility is overwhelming on the opposite side, so great that I myself can reach no firm conclusion about what has really happened. More is involved than Serendipity's established reputation. There is the entire covenant. Members of the League do not kidnap and drug each other's agents. Not ever!"

"We did ask the Lunar police about a warrant," Chee said. She jerked her tail at the Wodenite. "Tin Pan Buddha insisted. We were laughed at. Literally. We can't propose a League action—strike first, argue with the law afterward. We aren't on the Council. You are."

"I can propose it," van Rijn said carefully. "After a month's wringle-wrangle, I get voted No. They won't believe either, SI would do something so bad like that, for some sternly commercial reason."

"I doubt if we have a month, regardless," Chee said. "Think. Suppose Dave has been brainscrubbed. They'll've done it to keep him from reporting to you what he learned from their damned machine. They'll pump him for information and advice, too. Might as well. But he is evidence against them. Any medic can identify his condition and cure it. So as soon as possible—or as soon as necesary—they'll get rid of the evidence. Maybe send him off in a spaceship, with his new fiancée to control him. Maybe kill him and disintegrate the body. I don't see where Adzel and I had any alternative except to investigate as we did. Nevertheless, our investigations will probably cause SI to speed up whatever timetable it's laid out for Captain Falkayn."

Van Rijn smoked through an entire minute. Then: "Your ship is loaded for bear, also elephant and walrus. You could maybe blast in, you two, and snatch him?"

"Maybe," Adzel said. "The defenses are unknown. It would be an act of piracy."

"Unless he was a prisoner. In that case, we can curry ruffled fur afterward. I bet curried fur tastes terrible. But you turn into heroes."

"What if he is there voluntarily?"

"You turn into pumpkins."

"If we strike, we risk his life," said Adzel. "Quite possibly, if he is not a prisoner, we take several innocent lives. We are less concerned with our legal status than with our shipmate. But however deep our affection for him, he is of another civilization, another species, yes, a wholly different evolution. We cannot tell whether he was in a normal state when he called us. He acted peculiarly, true. But might that have been due to the emotion known as love? Coupled, perhaps, with a sense of guilt at breaking his contract? You are human, we are not. We appeal to your judgment."

"And mix me—old, tired, bothered, sorrowful me, that wants nothing except peace and a little, little profit—right in with the glue," van Rijn protested.

Adzel regarded him steadily. "Yes, sir. If you authorize us to attack, you commit yourself and everything you own, for the sake of one man who may not even need help. We realize that."

Van Rijn drew on his cigar till the end glowed volcanic. He pitched it aside. "Hokay," he growled. "Is a flousy boss does not stand by his people. We plan a raid, us, ha?" He tossed off his remaining beer and threw the tankard to the deck. "By damn," he bellowed, "I wish I was going along!"

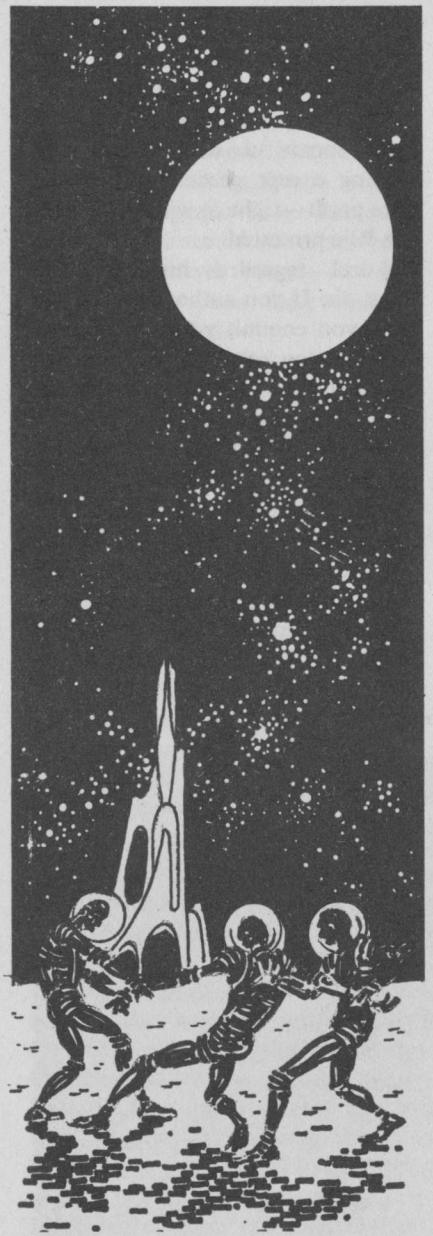
TO BE CONTINUED

In Times To Come

Next month's issue will, of course, continue "Satan's World"—which very remarkable world you haven't as yet encountered. An ultra-frozen—approximately 5° above absolute zero—world orbiting less than 100,000,000 miles from a blue-white giant sun thousands of times as radiant as Sol.

If you consider that data crazy—so was Satan's World.

The feature novelette will be Christopher Anvil's story "The Royal Road." It's a continuation of the series involving our three friends who—with the help of a highly intelligent spaceship—promoted themselves to highly royal titles. However, it was not that kind of royalty that led to the Royal Road. *(continued on page 84)*



Exile to Hell

Hell is, of course, the worst imaginable place you least want to be forced to experience. It's an attitude about a place—Fiji for an Eskimo, Baffin Island for a Polynesian . . .

ISAAC ASIMOV

Illustrated by Kelly Freas

"The Russians," said Dowling, in his precise voice, "used to send prisoners to Siberia in the days before space travel had become common. The French used Devil's Island for the purpose. The British sailed them off to Australia."

He considered the chessboard carefully and his hand hesitated briefly over the bishop.

Parkinson, at the other side of the chess board, watched the pattern of the pieces absently. Chess was, of course, the professional game of computer-programmers but, under the circumstances, he lacked enthusiasm. By rights, he felt with some annoyance, Dowling should have been even worse off; he was programming the prosecution's case.

There was, of course, a tendency for the programmer to take over some of the imagined characteristics of the computer—the unemotionality, the imperviousness to anything but logic. Dowling reflected that in his precise hair-part and in the restrained elegance of his clothing.

Parkinson, who preferred to program the defense in the law cases in which he was involved, also preferred to be deliberately careless in the minor aspects of his costume.

He said, "You mean exile is a well-established punishment and therefore not particularly cruel."

"No, it *is* particularly cruel, but also it *is* well-established, and it has become the perfect deterrent."

Dowling moved the bishop and did not look upward. Parkinson, quite involuntarily, did.

Of course, he couldn't see anything. They were indoors, in the comfortable modern world tailored to human needs, carefully protected against the raw environment. Out there, the night would be bright with its illumination.

When had he last seen it? Not for a long time. It occurred to him to wonder what phase it was in right now. Full? Gleaming? Or was it in its crescent phase? Was it a bright fingernail of light low in the sky?

By rights it should be a lovely sight. Once it had been. But that had been centuries ago, before space travel had become common and cheap, and before the surroundings all about them had grown sophisticated and controlled. Now the lovely light in the sky had become a new and more horrible Devil's Island hung in space.

No one even used its name any longer, out of sheer distaste. It was "It." Or it was less than that, just a silent, upward movement of the head.

Parkinson said, "You might have allowed me to program the case against exile generally."

"Why? It couldn't have affected the result."

"Not this one, Dowling. But it might have affected future cases. Future punishments might be commuted to the death sentence."

"For someone guilty of equipment-damage? You're dreaming."

"It was an act of blind anger. There was intent to harm a human being, granted; but there was no intent to harm equipment."

"Nothing; it means nothing. Lack of intent is no excuse in such cases. You know that."

"It *should* be an excuse. That's my point."

Parkinson advanced a pawn now, to cover his knight.

Dowling considered. "You're trying to hang on to the queen's attack, Parkinson, and I'm not going to let you. Let's see, now." And while he pondered, he said, "These are not primitive times, Parkinson. We live in a crowded world with no margin for error. As small a thing as a blown-out consistor could endanger a sizable fraction of our population. When anger endangers and subverts a power line, it's a serious thing."

"I don't question that—"

"You seemed to be doing so, when you were constructing the defense-program."

"I was not. Look, when Jenkins' laser beam cut through the field-warp, I myself was as close to death as anyone. A quarter hour's additional delay would have meant my end, too, and I'm completely aware of that. My point is only that exile is not the proper punishment!"

He tapped his finger on the chessboard for emphasis, and Dowling caught the queen before it went over. "Adjusting, not moving," he mumbled.

Dowling's eyes went from piece to piece and he continued to hesitate. "You're wrong, Parkinson. It *is* the proper punishment. Look, we all feel our absolute dependence on a complicated and rather fragile technology. A breakdown might kill us all and it doesn't matter whether the breakdown is deliberate, accidental, or caused by incompetence. Human beings demand the maximum punishment for any such deed as the only way they can feel secure. Mere death is not sufficient deterrent."

"Yes it is. No one wants to die."

"They want to live in exile up there, even less. That's why we've only had one such case in the last ten years, and only one exile. There, do something about that!" And Dowling nudged his queen's rook one space to the right.

A light flashed. Parkinson was on his feet at once. "The programming is finished. The computer will have its verdict now."

Dowling looked up phlegmatically, "You've no doubt about what that verdict will be, have you? Keep the board standing. We'll finish afterward."

Parkinson was quite certain he would lack the heart to continue the game. He hurried down the corridor to the courtroom, light and quick on his feet as always.

Shortly after he and Dowling had

entered, the judge took his seat, and then in came Jenkins, flanked by two guards.

Jenkins looked haggard, but stoical. Ever since the blind rage had overcome him and he had accidentally thrown a sector into un-powered darkness while striking out at a fellow worker, he must have known the inevitable consequence of this worst of all crimes. It helps to have no illusions.

Parkinson was not stoical. He dared not look squarely at Jenkins. He could not have done so without wondering, painfully, as to what might be going through Jenkins' mind at that moment. Was he absorbing, through every sense, all the perfections of familiar comfort before being thrust forever into the luminous Hell that rode the night sky?

Was he savoring the clean and pleasant air in his nostrils, the soft lights, the equable temperature, the pure water on call, the secure surroundings designed to cradle humanity in tame comfort?

While up there—

The judge pressed a contact and the computer's decision was converted into the warm, unmannered sound of a standardized human voice.

"A weighing of all pertinent information in the light of the law of the land and of all relevant precedents leads to the conclusion that Anthony Jenkins is guilty on all counts of the crime of equipment-damage and is subject to the maximum penalty."

There were only six people in the courtroom itself, but the entire population was listening by television.

The judge spoke in prescribed phraseology. "The defendant will be taken from here to the nearest spaceport and, on the first available transportation, be removed from this world and sent into exile for the term of his natural life."

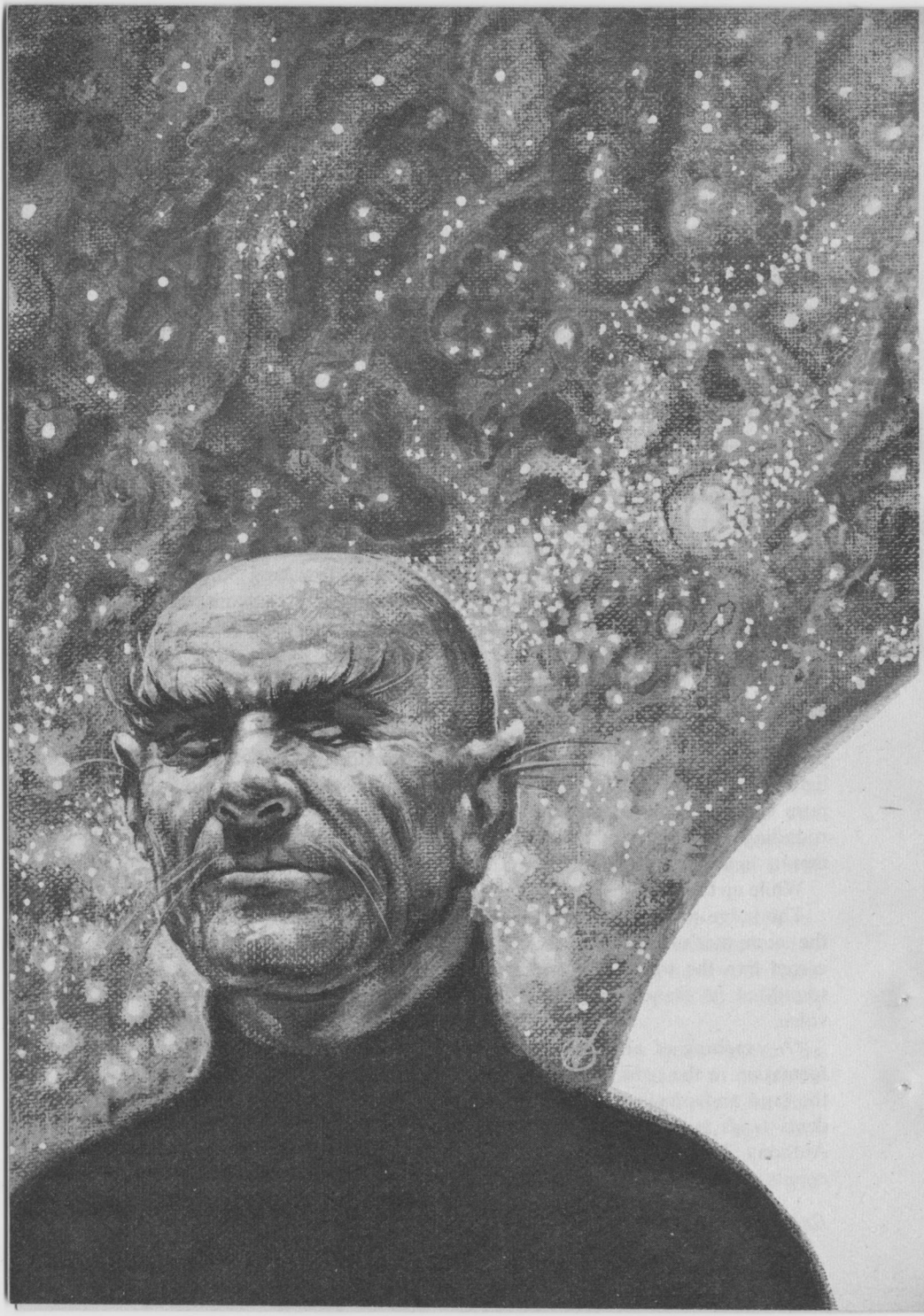
Jenkins seemed to shrink within himself, but he said no word.

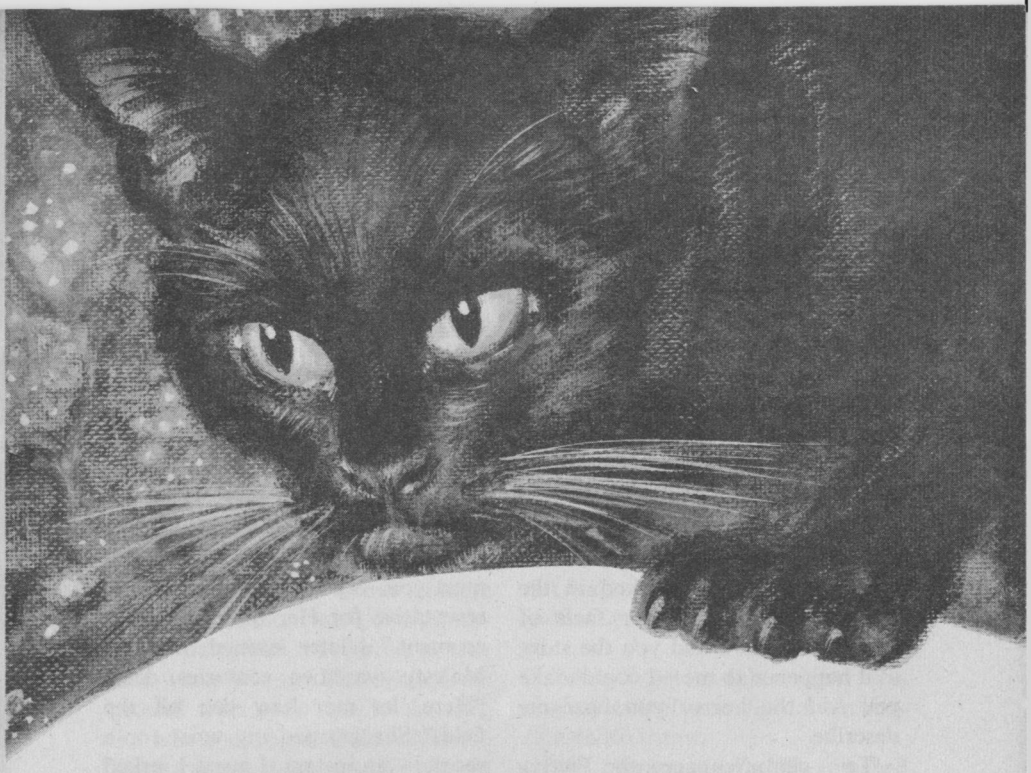
Parkinson shivered. How many, he wondered, would now feel the enormity of such a punishment for *any* crime? How long before there would be enough humanity among man to wipe out forever the punishment of exile?

Could anyone really think of Jenkins up there in space, without flinching? Could they think, and endure the thought, of a fellowman thrown for all his life among the strange, unfriendly, vicious population of a world of unbearable heat by day and frigid cold by night; of a world where the sky was a harsh blue and the ground a harsher, clashing green; where the dusty air moved raucously and the viscous sea heaved eternally.

And the gravity, that heavy—heavy—heavy—eternal—pull!

Who could bear the horror of condemning someone, for whatever reason, to leave the friendly home of the Moon for that Hell in the sky—the Earth? ■





Conquest By Default

There is some question as to what the terms "help" and "save" really mean. The old "Death before dishonor!" can mean, sometimes, "I'd rather die than learn that new idea!"

VERNOR VINGE

ILLUSTRATED BY KELLY FREAS

This all happened a long time ago, and almost twenty light-years from where we're standing now. You honor me here tonight as a humanitarian, as a man who has done something to bring a temporary light to the eternal darkness that is our universe. But you deceive yourselves. I made the situation just civilized enough so that its true brutality, shed of bloody drapery, can be seen.

I see you don't believe what I say. In this whole audience I suspect that only aMelmwn truly understands—and she better than I. Not one of you has ever been kicked in the teeth by these particular facts of life. Perhaps if I told you the story as it happened to me—I could make you *feel* the horror you hear me describe.

Two centuries ago, the Pwrlyg Spice & Trading Company completed the first interstellar flight. They were thirty years ahead of their nearest competitors. They had a whole planet at their disposal, except for one minor complication . . .

The natives were restless.

My attention was unevenly divided between the beautiful girl who had just introduced herself, and the ancient city that shimmered in the hot air behind her.

Mary Dahlmann. That was a hard name to pronounce, but I had studied Australian for almost two years, and I was damned if I couldn't say a name. I clumsily worked my way through a response. "Yes, ah, Miss, ah, Dahlmann, I am Ron Melmwn, and I am the new Company anthropologist. But I thought the vice president for Aboriginal Affairs was going to meet me."

Ngagn Chev dug me in the ribs. "Say, you really can speak that gabble, can't you, Melmwn?" he whispered in Mikin. Chev was Vice President for Violence—an O.K. guy, but an incurable bigot.

Mary Dahlmann smiled uncertainly at this exchange. Then she answered my question. "Mr. Horlig will be right along. He asked me to meet you. My father is Chief Representative for Her Majesty's Government." I later learned that Her Majesty was two centuries dead. "Here, let me show you off the field." She grasped my wrist for a second—an instant. I guess I jerked back. Her hand fell away and her eagerness vanished. "This way," she said icily, pointing to a gate in the force fence surrounding the Pwrlyg landing field. I wished very much I had not pulled away from her touch. Even though she was so blond and pale, she was a woman, and in a weird way, pretty. Besides, *she* had overcome whatever feelings she had against *us*.

There was an embarrassed silence, as the five of us cleared the landing craft and walked toward the gate.

The sun was bright—brighter than ours ever shines over Miki. It was also very dry. There were no clouds in the sky. Twenty or thirty

people worked in the field. Most were Mikin, but here and there were clusters of Terrans. Several were standing around a device in the corner of the field where the fence made a joint to angle out toward the beach. The Terrans knelt by the device.

Orange fire flickered from the end of the machine, followed by a loud *guda-bam-bam-bam*. Even as my conscious mind concluded that we were under fire, I threw myself on the ground and flattened into the lowest profile possible. You've heard the bromide about combat making life more real. I don't know about that, but it's certainly true that when you are flat against the ground with your face in the dirt, the whole universe looks different. That red-tan sand was *hot*. Sharp little stones bit into my face. Two inches before my face a clump of sage had assumed the dimensions of a vola tree.

I cocked my head microscopically to see how the others were doing. They were all down, too. Correction: that idiot Earthgirl was still standing. More than a second after the attack she was still working toward the idea that someone was trying to kill her. Only a dement or a Little Sister brought up in a convent could be so dense. I reached out, grabbed her slim ankle, and jerked. She came down hard. Once down, she didn't move.

Ngagn Chev and some accountant, whose name I didn't remember, were advancing toward the slug-thrower. That accountant had the fastest low-crawl I have ever seen. The Terrans frantically tried to lower the barrels of their gun—but it was really primitive and couldn't search more than five degrees. The little accountant zipped up to within twenty meters of the gun, reached into his weapons pouch, and tossed a grenade toward the Earthmen and their weapon. I dug my face into the dirt and waited for the explosion. There was only a muffled thud. It was a gas bomb—not frag. A green mist hung for an instant over the gun and the Terrans.

When I got to them, Chev was already complimenting the accountant on his throw.

"A private quarrel?" I asked Chev.

The security chief looked faintly surprised. "Why no. These fellows"—he pointed at the unconscious Terrans—"belong to some conspiracy to drive us off the planet. They're really a pitiful collection." He pointed to the weapon. It was composed of twenty barrels welded to three metal hoops. By turning a crank, the barrels could be rotated past a belt cartridge feeder. "That gun is hardly more accurate than a shrapnel bomb. This is nothing very dangerous, but I'm going to catch chaos for letting them get within the perimeter. And I can tell you, I am going to scorch those agents of mine that let these abos sneak in.

Anyway, we got the pests alive. They'll be able to answer some questions." He nudged one of the bodies over with his boot. "Sometimes I think it would be best to exterminate the race. They don't occupy much territory but they sure are a nuisance.

"See," he picked up a card from the ground and handed it to me. It was lettered in neat Mikin: MERLYN SENDS YOU DEATH. "Merlyn is the name of the 'terrorist' organization—it's nonprofit, I think. Terrans are a queer lot."

Several Company armsmen showed up then and Chev proceeded to bawl them out in a very thorough way. It was interesting, but a little embarrassing, too. I turned and started toward the main gate. I still had to meet my new boss—Horlig, the Vice President for Abo Affairs.

Where was the Terran girl? In the fuss I had completely forgotten her. But now she was gone. I ran back to where we stood when the first shots were fired. I felt cold and a little sick as I looked at the ground where she had fallen. Maybe it had been a superficial wound. Maybe the medics had carried her off. But whatever the explanation, a pool of blood almost thirty centimeters wide lay on the sand. As I watched, it soaked into the sand and became a dark brown grease spot, barely visible against the reddish-tan soil. As far as appearances go, it could have been human blood.

Horlig was a Gloyn. I should have known from his name. As it was, I got quite a surprise when I met him. With his pale gray skin and hair, Herul Horlig could easily be mistaken for an Earthman. The Vice President for Aboriginal Affairs was either an Ostentatious Simplist or very proud of his neolithic grandparents. He wore wooden shin plates and a black breechclout. His only weapon was a machine dartgun strapped to his wrist.

It quickly became clear that the man was unhappy with me as an addition to his staff. I could understand that. As a professional, my opinions might carry more weight with the Board of Directors and the President than his. Horlig did his best to hide his displeasure, though. He seemed a hard-headed, sincere fellow who could be ruthless, but nevertheless believed whatever he did was right. He unbent considerably during our meal at Supply Central. When I mentioned I wanted to interview some abos, he surprised me by suggesting we fly over to the native city that evening.

When we left Central, it was already dark. We walked to the parking lot, and got into Horlig's car. Three minutes later we were ghosting over the suburbs of Adelaide-west. Horlig cast a practiced eye upon the queer rectangular street pattern below, and brought us down on the lawn of a two-story wood house. I started to get out.

"Just a minute, Melmwn," said

Horlig. He grabbed a pair of earphones and set the TV on pan. I didn't say anything as he scanned the quiet neighborhood for signs of hostile activity. I was interested: usually a Simplist will avoid using advanced defense techniques. Horlig explained as he set the car's computer on SENTRY and threw open the hatch:

"Our illustrious Board of Directors dictates that we employ 'all security precautions at our disposal.' Bunk. Even when these Earth creatures attack us, they are less violent than good-natured street brawlers back home. I don't think there have been more than thirty murders in this city since Pwrlyg landed twenty years ago."

I jumped to the soft grass and looked around. Things really were quiet. Gas lamps lit the cobblestone street and dimly outlined the wood buildings up and down the lane. Weak yellow light emerged from windows. From down the street came faint laughter of some party. Our landing had gone unnoticed.

Demoneyes. I stepped back sharply. The twin yellow disks glittered maniacally, as the cat turned to face us, and the lamps' light came back from its eyes. The little animal turned slowly and walked disdainfully across the lawn. This was a bad omen indeed. I would have to watch the Signs very carefully tonight. Horlig was not disturbed at all. I don't think he knew I was brought up a witch-fearer. We started up the walk toward the nearest house.

"You know, Melmwn, this isn't just any old native we're visiting. He's an anthropologist, Earth style. Of course, he's just as insipid as the rest of the bunch, but our staff is forced to do quite a bit of liaison work with him."

An anthropologist! This was going to be interesting, both as an exchange of information and of research procedures.

"In addition, he's the primary representative chosen by the Australian *gowernmen'* . . . a *gowernmen'* is sort of a huge corporation, as far as I can tell."

"Uh-huh." As a matter of fact. I knew a lot more about the mysterious *government* concept than Horlig. My Scholarate thesis was a theoretical study of macro organizations. The paper was almost rejected because my instructors claimed it was an analysis of a patent impossibility. Then came word that three macro organizations existed on Earth.

We climbed the front porch steps. Horlig pounded on the door. "The fellow's name is Nalman."

I translated his poor pronunciation back to the probable Australian original: Dahlmann! Perhaps I could find out what happened to the Earthgirl.

There were shuffling steps from within. Whoever it was did not even bother to look us over through a

spy hole. Earthmen were nothing if not trusting. We were confronted by a tall, middle-aged man with thin, silvery hair. His hand quavered slightly as he removed the pipe from his mouth. Either he was in an extremity of fear or he had terrible coordination.

But when he spoke, I knew there was no fear. "Mr. Horlig. Won't you come in?" The words and tone were mild, but in that mildness rested an immense confidence. In the past I had heard that tone only from Umpires. It implied that neither storm, nor struggle, nor crumbling physical prowess could upset the mind behind the voice. That's a lot to get out of six quiet words—but it was all there.

When we were settled in Scholar Dahlmann's den, Horlig made the introductions. Horlig understood Australian fairly well, but his accent was atrocious.

"As you must surely know, Scholar Dahlmann, the objective voyage time to our home planet, Epsilon Eridani II, is almost twelve years. Three days ago the third Pwrlyg Support Fleet arrived and assumed a parking orbit around the Earth. At this instant, they soar omnipotent over the lands of your people." Dahlmann just smiled. "In any case, the first passengers have been unfrozen and brought down to the Pwrlyg Ground Base. This is Scholar Ron Melmwn, the anthropologist that the Company has brought in with the Fleet."

From behind his thick glasses, Dahlmann inspected me with new interest. "Well, I certainly am happy to meet a Mikin anthropologist. Our meeting is something of a first I believe."

"I think so, too. Your institutions are ill-reported to us on Miki. This is natural since Pwrlyg is primarily interested in the commercial and immigration prospects of your Northern Hemisphere. I want to correct the situation. During my stay I hope to use you and other Terrans for source material in my study of your history and, uh, government. It's especially good luck that I meet a professional like yourself."

Dahlmann seemed happy to discuss his people and soon we were immersed in Terran history and cultures. Much of what he told me I knew from reports received, but I let him tell the whole story.

It seems that two hundred years before, there was a high technology culture in the Northern Hemisphere. The way Dahlmann spoke, it was very nearly Mikin caliber—the North People even had some primitive form of space flight. Then there was a war. A war is something like a fight, only much bigger, bigger even than an antitrust action. They exploded more than 12,500 megatons of bombs on their own cities. In addition, germ cultures were released to kill anybody who survived the fusion bombs. Without radiation screens and pan-

phagic viruses, it was a slaughter. Virtually all the mammals in the Northern Hemisphere were destroyed, and according to Dahlmann, there was, for a while, the fear that the radiation poisons and disease strains would wipe out life in the South World, too.

It is very difficult to imagine how anything like that could get started in the first place—the cause of "war" was one of the objects of my research. Of course the gross explanation was that the Terrans never developed the Umpire System or the Concept of Chaos. Instead they used the gargantuan organizations called "governments." But the underlying question was why they chose this weird governmental path at all. Were the Terrans essentially subhuman—or is it just luck that we Mikins discovered the True Way?

The war didn't discourage the Terrans from their fundamental errors. Three governments rose from the ashes of the war. The Australian, the Sudamerican, and the Zulunder. Even the smallest nation, Australia, had one thousand times as many people as the Pwrlyg Spice & Trading Company. And remember that Pwrlyg is already as big as a group can get without being slapped with an antitrust ruling by the Umpires.

I forgot my surroundings as Dahlmann went on to explain the present power structure, the struggle of the two stronger nations to secure colonies in portions of the Northern Hemisphere where the war poisons had dissipated. This was a very dangerous situation, according to the Terran anthropologist, since there were many disease types dormant in the Northern Hemisphere that could start hellish plagues in the South World, for the Terrans were still more than a century behind the technology they had achieved before the blowup.

Through all this discussion, Horlig maintained an almost contemptuous silence, not listening to what we were saying so much as observing us as specimens. Finally he interrupted. "Well, I'm glad to see you both hit it off so well. It's getting too late for me though. I'll have to take your leave. No, you don't have to come back just yet, Melmwn. I'll send the car back here on auto after I get to Base."

"You don't have to bother with that, Horlig. Things look pretty tame around here. I can walk back."

"No," Horlig said definitely. "We have regulations. And there is always this Merlyn, you know."

The Merlyn bunglers didn't frighten me, but I remembered that cat's Demoneyes. Suddenly I was happy to fly back. After Horlig had left, we returned to the den and its dim gas mantle lamps. I could understand why Dahlmann's eyesight was so bad—you try reading at night without electric lights for a couple decades and you'll go blind, too. He rummaged around in his desk and drew out a pouch of "to-

bacco." He fumbled the ground leaves into the bowl of his pipe and tamped them down with a clumsy forefinger. I thought he was going to burn his face when he lit the mixture. Back home, anyone with coordination that poor would be dead in less than two days, unless he secluded himself in a pacific enclave. This Terran culture was truly alien. It was different along a dimension we had never imagined, except in a few mathematical theories of doubtful validity.

The Terran sat back and regarded me for a long moment. Behind those thick lenses his eyes loomed large and wise. Now I was the one who seemed helpless. Finally he pulled back the curtains and inspected the lawn and the place where the car had rested. "I believe, Scholar Melmwn, that you are a reasonable and intelligent individual. I hope that you are even more than that. Do you realize that you are attending the execution of a race?"

This took me completely by surprise. "What! What do you mean?"

He appeared to ignore my question. "I knew when you people first landed and we saw your machines: our culture is doomed. I had hoped that we could escape with our lives —though in our own history, few have been so lucky. I hoped that your social sciences would be as advanced as your physical. But I was wrong."

"Your vice president for Aboriginal Affairs arrived with the Second 'wrlyg Fleet. Is genocide the 'wrlyg policy or is it Horlig's private scheme?"

This was too much. "I find your questions insulting, Terran! The Pwrlyg Company intends you no harm. Our interests are confined to reclaiming and colonizing areas of your planet that you admit are too hot for you to handle."

Now Dahlmann was on the defensive. "I apologize, Scholar Melmwn, for my discourtesy. I dived into the subject too hastily. I don't mean to offend you. Let me describe my fears and the reasons for them. I believe that Herul Horlig is not content with the cultural destruction of Earth. He would like to see all Terrans dead. Officially his job is to promote cooperation between our races and to eliminate possible frictions. In fact, he has played the opposite role. Since he arrived, his every act has increased our mutual antagonism. Take for instance, the 'courtesy call' he made to the Zulunder capital. He and that armed forces chief of yours, Noggin Chem —is that how you pronounce the name?"

"Ngagn Chev," I corrected.

"They breezed into Pret armed to the teeth—fifteen air tanks and a military air-space craft. The Zulunder government requested that Horlig return the spaceship to orbit before they initiate talks. In response, the Mikins destroyed half the city. At the time I hoped that it was just the act of some demented

gunner, but Horlig staged practically the same performance at Buenos Aires, the capital of Sudamerica. And this time he had no pretext whatsoever, since the Americans bent over backwards trying to avoid a clash. Every chance he gets, the man tries to prove how vicious Mikins can be."

I made a note to check on these events when I returned to Base. Aloud I said: "Then you believe that Horlig is trying to provoke terrorist movements like this Merlyn thing, so he'll have an excuse to kill all Terrans?"

Dahlmann didn't answer immediately. He carefully pulled back the curtain again and looked into the yard. The aircar had not yet returned. I think he realized that the mikes aboard the car could easily record what we were saying. "That's not quite what I mean, Scholar Melmwn. I believe that Horlig *is* Merlyn."

I snorted disbelief.

"I know it sounds ridiculous—but everything fits. Just take the word 'Merlyn.' In Australian this refers to a magician who lived ages ago in England—that was one of the great pre-war nations in the Northern Hemisphere. At the same time it is a word that easily comes to the lips of a Mikin since it is entirely pronounceable within your phoneme system—it contains no front oral stops. With its magical connotations, it is designed to set fear in Mikins. The word Merlyn is a convenient handle for the fear and hatred that Mikins will come to associate with Terran activities. But note—we Terrans are a very unsuperstitious lot, especially the Australians and the Zulunders. And very few Terrans realize how superstitious many Mikins—the witch-fearers and the demon-mongers—are. The Merlyn concept is the invention of a Mikin mind."

Dahlmann rushed on to keep me from interrupting. "Consider also: When terrorist attacks are thwarted and the Terrans captured, they turn out to be ill-equipped rumdums—not the skilled agents of some world-wide plot. But whenever great damage is done—say the detonation of the Company ammo stores last year—no one is caught. In fact, it is almost impossible to imagine how the job could be pulled off without Mikin technology. At first I discounted this theory, because so many Mikins were killed in the ammo blast, but I have since learned that you people do not regard such violence as improper business procedure."

"It depends on who you are working for. There are plenty of Violent Nihilists on Miki, and occasionally they have their own companies. If Pwrlyg is one such, he's been keeping the fact a secret."

"What it adds up to is that Horlig is creating an artifical threat, which he believes will eventually justify genocide. One last element of proof.

You came in on a Fleet landing craft this afternoon, did you not? Horlig was supposed to greet you. He invited me out to meet you on the field, as the Chief Representative of Her Majesty's Government in Australia. This is the first friendly gesture the man has made in three years. As it happened I couldn't go. I sent my daughter, Mary. But when you actually landed, Horlig got a sliver from his shin board, or something equally idiotic, and so couldn't go onto the field—where just five minutes later a group of 'Merlyn's Men' tried to shoot the lot of you."

Mary Dahlmann. I stuttered over the next question. "How . . . how is your daughter, Scholar Dahlmann?"

Dahlmann was nonplussed for a moment. "She's fine. Apparently someone pulled her out of the line of fire. A bloody nose was the sum total of her 'injuries'."

For some reason I felt great relief at this news. I looked at my watch; it was thirty minutes to midnight, the witching hour. Tonight especially I wanted to get back to Base before Demonsloose. And I hadn't known that Merlyn was the name of a wizard. I stood up. "You've certainly given me something to think about, Dahlmann. Of course you know where my sympathies ultimately lie, but I'll be alert for signs of the plot you speak of, and I won't tell anyone what you've told me."

The Terran rose. "That's all I ask." He led me out of the den, and into the darkened mainroom. The wood floor creaked comfortingly beneath the thick carpet. Crystal goblets on wood shelving were outlined in faint glistening reflection from the den light. To the right a stairway led to the second floor. Was *she* up there sleeping, or out with some male? I wondered.

As we approached the door, something much more pertinent occurred to me. I touched Dahlmann's elbow; he stopped, ready to open the door. "A moment, Scholar Dahlmann. All the facts you present fit another theory: namely, that some Terran, expert in Mikin ways, yourself perhaps, has manufactured Merlyn and the rumor that members of the Pwrlyg Company are responsible for the conspiracy."

I couldn't tell for sure, but I think he smiled. "Your counter-proposal does indeed fit the facts. However, I am aware of the power that you Mikins have at your disposal, and how futile resistance would be." He opened the door. I stepped out onto the porch. "Good night," he said.

"Good night." I stood there for several seconds, listening to his retreating footsteps, and puzzling over our last exchange.

I turned and was halfway across the porch when a soft voice behind me asked, "And how did you like Daddy?" I jumped a good fifteen centimeters, spun around with my wrist gun extended. Mary Dahlmann sat on a wooden swing hung

from the ceiling of the porch. She pushed the swing gently back and forth. I walked over and sat down beside her.

"He's an impressive and intelligent man," I answered.

"I want to thank you for pulling me down this afternoon." Her mind seemed to jump randomly from one topic to another.

"Uh, that's O.K. There really wasn't too much danger. The gun was so primitive that I imagine it's almost as unpleasant to be behind it as in front. I would've thought you'd be the first to recognize it as an attack. You must be familiar with Australian weapons."

"Are you kidding? The biggest gun I've ever seen was a 20mm rifle in a shooting exhibition."

"You mean you've never been under fire until today?" I saw that she hadn't. "I didn't mean to be insulting, Miss Dahlmann. I haven't really had much first-hand information about Terrans. That's one reason why I'm here."

She laughed. "If you're puzzled about us, then the feeling is mutual. Since my father became Chief Representative, he's been doing everything he can to interview Mikins and figure out the structure of your culture. I'll bet he spent half the night pumping you. As an anthropologist, you should be the best source he can find."

Apparently she wasn't aware of her father's true concerns.

"In the last three years we've managed to interview more than fifteen of you Mikins. It's crazy. You're all so different from one another. You claim you are all from the same continent, and yet each individual appears to have an entirely different cultural background. Some of you don't wear clothes at all, while others go around with every inch of their skin covered. Some, like Horlig, make a fetish of primitiveness. But we had one fellow here who had so many gadgets with him that he had to wear powered body armor. He was so heavy, he busted my father's favorite chair. We can't find any common denominator. Mikins believe in one god, or in many, or in none. At the same time, many of you are dreadfully superstitious. We've always wondered what aliens might be like, but we never guessed that— What's the matter?"

I pointed shakily at the creature in the street. She placed a reassuring hand on my arm. "Why, that's just a cat. Don't you have catlike creatures on Miki?"

"Certainly."

"Why the shock then? Are your cats poisonous or something?"

"Of course not. Many people keep them as pets. It's just that it's a bad sign to see one at night—an especially bad sign if it looks at you and its eyes glow." I was sorry when she withdrew her hand.

She looked at me closely. "I hope you won't be angry, Mr. Melmwn, but this is exactly what I mean. How can a race that travels between the

stars believe in ill or good omens? Or have you developed magic as a science?"

"No, that's not it. Many Mikins don't believe in signs at all, and depending on whether you are a demon-monger or a witch-fearer, you recognize different signs. As for how I personally can believe in nonempirical, nonscientific signs—that's easy. There are many more causal relations in this universe than Mikin science will ever discover. I believe that witch-fearers have divined a few of these. And though I am quite a mild witch-fearer, I don't take any chances."

"But you are an anthropologist. I should think in your studies you would see so many different attitudes and superstitions that you would disregard your own."

I watched carefully as the cat went round the corner of the house. Then I turned to look at Mary Dahlmann. "Is that how it is with Terran anthropologists? Perhaps then I should not translate my occupation as 'anthropology.' Before Pwrlyg, I was employed by the Anavog Pacific Enclave & Motor Corporation. A fine group. As anthropologist, my job was to screen the background attitudes of perspective employees. For instance, it just wouldn't do to have a Cannibal and a Militant Vegetarian work next to each other on the production line—they'd kill each other inside of three hours, and the corporation would lose money."

She pushed the swing back with an agitated kick. "But now we're back where we started. How can a single culture produce both cannibals and 'militant' vegetarians?"

I thought about it. Her question really seemed to go beyond cultures entirely—right to the core of reality. I had practiced my specialty within the Mikin framework—where such questions never came up. Maybe I should start with something basic.

"Our system is founded on the Concept of Chaos. The universe is basically a dark and unhappy place—a place where evil and injustice and randomness rule. The ironic thing is that the very act of organization creates the potential for even greater ruin. Social organizations have a natural tendency to become monopolistic and inflexible. When they finally break down, it is a catastrophic debacle. So, we must accept a great deal of disorder and violence in our lives if we are to avoid a complete blowup later.

"Every Mikin is free to *try* anything. Naturally, in order to survive, groups of people cooperate—and from this you get the tens of thousands of organizations, corporations, and convents that make our civilization. But no group may become monopolistic. This is why we have Umpires. I don't think you have anything comparable. Umpires see that excessively large organizations are never formed. They

keep our society from becoming rigid and unresponsive to the natural world. Our system has lasted a very long time." *Much longer than yours,* I added to myself.

She frowned. "I don't understand. Umpires? Is this some sort of police force? How do they keep governments from forming? What's to keep the Umpires from becoming a government themselves?"

If I didn't watch out, I was going to learn more about Miki than I did about Earth. Mary's questions opened doors I never knew existed. My answer was almost as novel to me as it was to her. "I suppose it's because the Umpire tradition is very old with us. With one minor exception, all Mikins have had this tradition for almost four thousand years. The Umpires probably originated as a priest class serving a number of different nomad tribes. There never were many Umps. They go unarmed. They have bred for intelligence and flexibility. There's quite a bit of, uh, mystery—which we take for granted—surrounding them. I believe that they live under the influence of some rather strange drugs. You might say that they are brainwashed. In all history, there is no period in which they have sought power. Though they spend most of their lives in the abstract study of behavior science, their real task is to watch society for signs of bigness.

"There's one watching Pwrlyg right now. If he decides that Pwrlyg is too big—and that's a distinct possibility, since there are almost twelve thousand Pwrlyg employees altogether—the Ump will issue an, uh, antitrust ruling, describing the situation and ordering certain changes. There is no appeal. Defiance of an antitrust ruling is the only deed that is recognized by all Mikins as a sin. When there is such defiance, all Mikins are bound to take antitrust action—that is, to destroy the criminal. Some antitrust actions have involved fusion bombs and armies—they're the closest thing we have to wars."

She didn't look convinced. "Frankly, I can't imagine how such a system could avoid becoming a dictatorship of 'Umpires'."

"I feel the same incredulity about your civilization."

"How big are your 'organizations'?"

"It might be a single person. More than half the groups on Miki are just families or family groups. Anything goes unless it threatens stability—or becomes too large. The largest groups allowed are some of the innocuous religious types—the Little Brother Association, for instance. They preach approximately the principles I read of in your Christianity. But they don't proselytize, and so manage to avoid antitrust rulings. The largest 'hardware' organizations have about fifteen thousand employees."

"And how can a company support interstellar operations?"

"Yes, that's a very tricky point.

Pwrlyg had to cooperate with several hundred industrial groups to do it. They came mighty close to antitrust."

She sat silently, thinking all this over. Then she asked, "When can we expect an antitrust ruling against the Australian government?"

I laughed, "You don't have to worry about that. No offense, but antitrust can only apply to human groupings."

She didn't like that at all, but she didn't argue it either. Instead she came back with, "Then that means we also don't have Umpire protection if Pwrlyg commits genocide upon us."

That was a nasty conclusion but it fitted the letter of custom. Killing millions of humans would warrant antitrust, but Terrans weren't human.

For an instant I thought she was laughing, low and bitter. Then her face seemed to collapse and I knew she was crying. This was an unpleasant turn of events. Awkwardly, I put my arm around her shoulders and tried to comfort her. She no longer seemed to me an abo, but simply a person in pain. "Please, Mary Dahlmann. My people aren't monsters. We only want to use places on your planet that are uninhabited, that are too dangerous for you. Our presence will actually make Earth safer. When we colonize the North World, we'll null the radiation poisons and kill the war viruses."

That didn't stop the tears, but she did move closer into my arms. Several seconds passed and she mumbled something like, "History repeats." We sat like that for almost half an hour.

It wasn't until I got back to Base that I remembered that I had been out between Demonsloose and Dawn without so much as a Hexagram.

I got my equipment installed the next day. I was assigned an office only fifty-four hundred meters from the central supply area. This was all right with me since the site was also quite near the outskirts of Adelaide-west. Though the office was made entirely of local materials, the style was old *vimwv*. The basement contained my sleeping and security quarters, and the first floor was my office and business machines. The surface construction was all hand-polished hardwood. The roof was tiled with rose marble and furnished with night chairs and a drink mixer. At the center of the roof was a recoilless rifle and a live map of the mine field around the building. It was all just like home—which is what I had specified when I had signed the contract back on Miki. I had expected some chiseling on the specifications once we got out in the boondocks, but Pwrlyg's integrity was a pleasant surprise.

After I checked out the equipment, I called Horlig and got a copy of his mission log. I wanted to check

on Dahlmann's charges. Horlig was suspiciously unhappy about parting with the information, but when I pointed out that I was without a job until I got background info, he agreed to squirt me a copy. The incidents were more or less as Dahlmann had described them. At Pret, though, the Zulunders attacked the air tanks with some jury-rigged anti-aircraft weapon—so the retaliation seemed justified. There was also one incident that Dahlmann hadn't mentioned. Just five days before, Chev—on Horlig's orders—burned the food supplies of the Sudamerican colony at Panama, thus forcing the Terran explorers to return to the inhabited portions of their continent. I decided to keep a close watch on these developments. There could be something here quite as sinister as Dahlmann claimed.

Later that day, Horlig briefed me on my first assignment. He wanted me to record and index the Canberra Central Library. The job didn't appeal at all. It was designed to keep me out of his hair. I spent the next couple weeks getting equipment together. I found Robert Dahlmann especially helpful. He telegraphed his superiors in Canberra and they agreed to let us use Terran clerical help in the recording operation. (I imagine part of the reason was that they were eager to study our equipment.) I never actually flew to Canberra. Horlig had some deputy take the stuff out and instruct the natives on how to use it. It turned out the Canberra library was huge—almost as big as the Information Services library at home. Just supervising the indexing computers was a full-time job. It was a lot more interesting than I thought it would be. When the job was done I would have many times the source material I could have collected personally.

A strange thing: as the weeks went by, I saw more and more of Mary Dahlmann. Even at this point I was still telling myself that it was all field work for my study of Terran customs. One day we had a picnic in the badlands north of Adelaide. The next she took me on a tour of the business district of the city—it was amazing how so many people could live so close together day after day. Once we even went on a train ride all the way to Murray Bridge. Railroads are stinking, noisy and dirty, but they're fun—and they transport freight almost as cheaply as a floater does. Mary had that spark of intelligence and good humor that made it all the more interesting. Still I claimed it was all in the cause of objective research.

About six weeks after my landing I invited her to visit the Pwrlyg Base. Though Central Supply is only four or five kilometers from Adelaide-west, I took her in by air, so she could see the whole Base at once. I think it was the first time she had ever flown.

The Pwrlyg Primary Territory is

a rectangular area fifteen by thirty kilometers. It was ceded by the Australian government to the Company in gratitude for our intercession in the Battle of Hawaii, seventeen years before. You might wonder why we didn't just put all our bases in the Northern Hemisphere, and ignore the Terrans entirely. The most important reason was that the First and Second Fleets hadn't had the equipment for a large-scale decontamination job. Also, every kilogram of cargo from Miki requires nearly 100,000 megatons of energy for the voyage to Earth: this is expensive by any reckoning. We needed all the labor and materials the locals could provide. Since the Terrans inhabited the Southern Hemisphere only, that's where our first base had to be.

By native standards, Pwrlyg paid extremely good wages. So good that almost thirty thousand Terrans were employed at the Ground Base. Many of these individuals lived in an area just off the Base, which Mary referred to as Clowntown. Its inhabitants were understandably enamored with the advantages of Mikin technology. Though their admiration was commendable, the results were a little ludicrous. Clowntowners tried to imitate the various aspects of Mikin life. They dressed eccentrically—by Terran standards—and adopted a variety of social behaviors. But their city was just as crowded as regular Australian urban areas. And though they had more scraps of our technology than many places in Australia, their city was filthy. Anarchy just isn't practical in such close quarters. They had absorbed the superficial aspects of our society without ever getting down to the critical matters of Umpires and antitrust. Mary had refused to go with me into Clowntown. Her reason was that police protection ceased to exist in that area. I don't think that was her real reason.

Below us, the blue sea and white breakers met the orange and gray-green bluffs of the shore. The great Central Desert extended right up to the ocean. It was difficult to believe that this land had once supported grass and trees. Scattered randomly across the sand and sage were the individual office and workshops of Company employees. Each of these had its own unique appearance. Some were oases set in the desert. Others were squat gray forts. Some even looked like Terran houses. And, of course, a good number were entirely hidden from sight, the property of Obscurantist employees who kept their location secret even from Pwrlyg. Taken as a whole, the Base looked like a comfortable metropolitan area on the A1 W1 peninsula. But, if the Company had originally based in the Northern Hemisphere, none of the amenities would have been possible. We would have had to live in prefab domes.

I swung the car in a wide arc and headed for the central area. Here

was the robot factory that provided us with things like air tanks and drink mixers—things that native labor couldn't construct. Now we could see the general landing area, and the airy columns of Supply Central. Nearby was housing for groups that believed in living together: the sex club, the Little Brothers. A low annex jutted off from the Little Brothers building—the creche for children born of Non-Affective parents. They even had some half-breed Terran-Human children there. The biologists had been amazed to find that the two species could interbreed —some claimed that this proved the existence of a prehistoric interstellar empire.

I parked the car and we took the lift to the open eating area at the top of Supply Central. The utilitarian cafeteria served the Extroverts on the Company staff. The position afforded an excellent view of the sailing boats and surfers as well as three or four office houses out in the sea.

We were barely seated when two Terran waiter-servants came over to take our order. One of them favored Mary with a long, cold look, but they took my order courteously enough.

Mary watched them go, then remarked, "They hate my guts, do you know that?"

"Huh? Why should they hate you?"

"I'm, uh, 'consorting' with the Greenies. That's you. I knew one of those two in college. A real nice guy. He wanted to study low-energy nuclear reactions; prewar scientists never studied that area thoroughly. His life ended when he discovered that you people know more than he'll ever discover, unless he starts over from the beginning on your terms. Now he's practically a slave, waiting on tables."

"A slave he's not, girl. Pwrlyg just isn't that type of organization. That fellow is a trusted and well cared for servant—an employee, if you will. He can pack up and leave any time. With the wages we pay, we have Terrans begging for jobs."

"That's exactly what I mean," Mary said opaquely. Then she turned the question around. "Don't you feel any hostility from your friends, for running around with an 'Earthie' girl?"

I laughed. "In the first place, I'm not running around. I'm using you in my studies. In the second place, I don't know any of these people well enough yet to have friends. Even the people I came out with were all in deep freeze, remember.

"Some Mikins actually support fraternization with the natives—the Little Brothers for instance. Every chance they get, they tell us to go out and make love—or is that verb just plain 'love'?—to the natives. I think there are some Company people who are definitely hostile toward you people—Horlig and Chev, for example. But I didn't ask their per-

mission, and, if they want to stop me, they'll have to contend with this," I tapped the dart gun on my wrist.

"Oh?" I think she was going to say something more when the servants came out and placed the food on our table. It was good, and we didn't say anything for several minutes. When we were done we sat and watched the surfers. A couple on a powered board were racing a dolphin across the bay. Their olive skins glistened pleasantly against the blue water.

Finally she spoke. "I've always been puzzled by that Horlig. He's odd even for a Mikin—no offense. He seems to regard Terrans as foolish and ignorant cowards. Yet as a person, he looks a lot more like a Terran than a Mikin."

"Actually, he's a different subspecies from the rest of us. It's like the difference between you and Zulunders. His bone structure is a little different and his skin is pale gray instead of olive green. His ancestors lived on a different continent than mine. They never developed beyond a neolithic culture there. About four hundred years ago, my race colonized his continent. We already had firearms then. Horlig's people just shriveled away. Whenever they fought us, we killed them; and whenever they didn't, we set them away in preserves. The last preserve, Gloyn, died about fifty years ago, I think. The rest interbred with the mainstream. Horlig is the nearest thing to a full-blooded Gloyn I've seen. Maybe that's why he affects primitiveness."

Mary said, "If he weren't out to get us Terrans, I think I could feel sorry for him."

I couldn't understand that comment. Horlig's race may have been mistreated in the past, but he was a lot better off than his ancestors ever were.

Three tables away, another couple was engaged in an intense conversation. Gradually it assumed the proportions of an argument. The man snapped an insult and the woman returned it with interest. Without warning, a knife appeared in her hand, flashed at the other's chest. But the man jumped backward, knocking over his chair. Mary gasped, as the man brought his knife in a grazing slash across the woman's middle. Red instantly appeared on green. They danced around the tables, feinting and slashing.

"Ron, do something! He's going to kill her."

They were fighting in a meal area, which is against Company regs, but on the other hand, neither was using power weapons. "I'm not going to do anything, Mary. This is a lovers' quarrel."

Mary's jaw dropped. "A lovers' quarrel? What—"

"Yeah," I said, "they both want the same woman." Mary looked sick. As soon as the fight began, a Little Brother at the other end of

the roof got up and sprinted toward the combatants. Now he stood to one side, pleading with them to respect the holiness of life, and to settle their differences peacefully. But the two weren't much for religion. The man hissed at the Little Brother to get lost before he got spitted. The woman took advantage of her opponent's momentary inattention to pink his arm. Just then a Company officer arrived on the roof and informed the two just how big a fine they would be subject to if they continued to fight in a restricted area. That stopped them. They backed away from each other, cursing. The Little Brother followed them to the lift as he tried to work out some sort of reconciliation.

Mary seemed upset. "You people lead sex lives that make free love look like monogamy."

"No, you're wrong, Mary. It's just that every person has a different outlook. It's as if all Earth's sex customs coexisted. Most people subscribe to some one type." I decided not to try explaining the sex club.

"Don't you have marriage?"

"That's just what I'm saying. A large proportion of us do. We even have a word analogous to your *missus—a*. For instance, Mrs. Smith is aSmith. I would say that nearly fifteen percent of all Mikins are monogamous in the sense you mean it. And a far greater percentage never engage in the activities you regard as perversions."

She shook her head. "Do you know—if your group had appeared without a superior technology, you would have been locked up in an insane asylum? I like you personally, but most Mikins are so awfully weird."

I was beginning to get irritated. "You're the one that's nuts. The Pwrlyg employees here on Earth were deliberately chosen for their intelligence and compatibility. Even the mildly exotic types were left at home."

Mary's voice wavered slightly as she answered. "I . . . I guess I know that. You're all just so terribly different. And soon all the ways I know will be destroyed, and my people will all be dead or like you—more probably dead. No, don't deny it. More than once in our history we've had episodes like the colonization of Gloyn. Six hundred years ago, the Europeans took over North America from the stone-age Indians. One group of Indians—a tribe called the Cherokee—saw that they could never overcome the invaders. They reasoned that the only way to survive was to adopt European ways—no matter how offensive those ways appeared. The Cherokee built schools and towns; they even printed newspapers in their own language. But this did not satisfy the Europeans. They coveted the Cherokee lands. Eventually they evicted the Indians and forced-marched the tribe halfway across the continent into a desert preserve. For all their willingness to adapt,

the Cherokee suffered the same fate that your Gloyn did.

"Ron, are you any different from the Europeans—or from your Mikin ancestors? Will my people be massacred? Will the rare survivor be just another Mikin with all your aw . . . all your alien customs? Isn't there any way you can save us from yourselves?" She reached out and grasped my hand. I could see she was fighting back tears.

There was no rationalizing it: I had fallen for her. I silently cursed my moralistic Little Brother upbringing. At that moment, if she had asked it, I would have run right down to the beach and started swimming for Antarctica. The feel of her hand against mine and the look in her eyes would have admitted to no other response, For a moment, I wondered if she was aware of the awful power she had. Then I said, "I'll do everything I c' n, Mary. I don't think you have to worry. We've advanced a long way since Gloyn. Only a few of us wish you harm. But I'll do anything to protect your people from massacre and exploitation. Is that enough of a commitment?"

She squeezed my hand. "Yes. It's a greater commitment than has been made in all the past."

"Fine," I said, standing up. I wanted to get off this painful subject as fast as possible. "Let me show you some of our equipment."

I took her over the Abo Affairs Office. The AAO wasn't a private residence-office, but it did bear Horlig's stamp. Even close up, it looked like a Gloyn rock-nest—a huge pile of boulders set in a marshy—and artificial—jungle. It was difficult, even for me, to spot the location of the recoilless rifles and machine guns. Inside, the neolithic motif was maintained. The computing equipment and TV screens were hidden behind woven curtains, and lighting came indirectly through chinks in the boulders. Horlig refused to employ Terrans, and his Mikin clerks and techs hadn't returned from lunch.

At the far end of the "room" a tiny waterfall gushed tinkling into a pool. Beyond the pool was Horlig's office, blocked from direct view by a rock partition. I noticed that the pool gave us an odd, ripply view into his office. That's the trouble with these "open" architectural forms: they have no real rooms, or privacy. In the water I could see the upside-down images of Horlig and Chev. I motioned Mary to be quiet, and knelt down to watch. Their voices were barely audible above the sound of falling water.

Chev was saying—in Mikin, of course: "You've been sensible enough in the past, Horlig. My suggestion is just a logical extension of previous policy. Once he's committed I'm sure that Pwrlyg won't have any objections. The Terrans have provided us with almost all the materials we needed from them. Their usefulness is over. They're

vermin. It's costing the Company two thousand man-hours a month to provide security against their attacks and general insolence." He waved a sheaf of papers at Horlig. "My plan is simple. Retreat from Ground Base for a couple weeks and send orbital radiation bombs over the three inhabited areas. Then drop some lethal viruses to knock off the survivors. I figure it would cost one hundred thousand man-hours total, but we'd be permanently rid of this nuisance. And our ground installations would be undamaged. All you have to do is camouflage some of our initial moves so that the Company officers on the Orbital Base don't catch—"

"Enough!" Horlig exploded. He grabbed Chev by the scruff of his cape and pulled him up from his chair. "You putrid bag of schemings. I'm reporting you to Orbit. And if you ever even *think* of that plan again, I personally will kill you—if Pwrlyg doesn't do it first!" He shoved the Vice President for Violence to the floor. Chev got up, ready to draw and fire, but Horlig's wrist gun pointed directly at the other's middle. Chev spat on the floor and backed out of the room.

"What was that all about?" Mary whispered. I shook my head. This was one conversation I wasn't going to translate. Horlig's reaction amazed and pleased me. I almost liked the man after the way he had handled Chev. And unless the incident had been staged for my benefit, it shattered Robert Dahlmann's theory about Merlyn and Horlig. Could Chev be the one masquerading as a Terran rebel? He had just used Terran sabotage as an excuse for genocide.

Or was Merlyn simply what it appeared to be: a terrorist group created and managed by deranged Terrans? Things were all mixed up.

Ngagn Chev stalked out of the passage that led to Horlig's office. He glared murderously at Mary and me as he swept past us toward the door hole.

I looked back into the pool, and saw the reflection of Horlig's face looking back out at me. Perhaps it was the ripple distortion from the waterfall, but he seemed just as furious with my eavesdropping as he had been with Chev. If it had been a direct confrontation, I would've expected a fight. Then Horlig remembered his privacy field and turned it on, blanking out my view.

My library project proceeded rapidly to a conclusion. Everything was taped, and I had $2x10^7$ subjects cross-indexed. The computerized library became my most powerful research tool. Dahlmann hadn't been kidding when he said that the pre-war civilization was high class. If the North Americans and Asians had managed to avoid war, they probably would have sent an expedition to Miki while we were still developing the fission bomb.

Wouldn't that have been a switch—the Terrans colonizing our lands!

In the two hundred years since the North World War, the Australians had spent a great deal of effort in developing social science. They hadn't given up their government mania, but they had modified the concept so that it was much less malevolent than in the past. Australia now supported almost eleven million people, at a fairly high standard of living. In fact, I think there was probably less suffering in Australia than there is in most parts of Miki. Too bad their way of life was doomed. The Terrans were people—they were human. (And that simple conclusion was the answer to the whole problem, though I did not see it then.) In all my readings, I kept in mind the solution I was looking for: some way to save the Terrans from physical destruction, even if it was impossible to save their entire culture.

As the weeks passed, this problem came to overshadow my official tasks. I even looked up the history of the Cherokee and read about Elias Boudinot and Chief Sequoyah. The story was chillingly similar to the situation that was being played out now by the Mikins and the Terrans. The only way that the Terrans could hope for physical safety was to adopt Mikin institutions. But even then, wouldn't we eventually wipe them out the same way President Andrew Jackson did the Cherokee? Wouldn't we eventually covet all the lands of Earth?

While I tried to come up with a long-term solution, I also kept track of Chev's activities. Some of his men were pretty straight guys, and I got to know one platoon leader well. Late one evening about ten weeks after my landing, my armsman friend tipped me off that Chev was planning a massacre the next day in Perth.

I went over to see Horlig that night. From his reaction to Chev's genocide scheme, I figured he'd squash the massacre plan. The Gloyn was working late. I found him seated behind his stone desk in the center of the AAO rock-nest. He looked up warily as I entered. "What is it, Melmwn?"

"You've got to do something, Horlig. Chev is flying three platoons to Perth. I don't know exactly what type of mayhem he's planning, but—"

"Rockingham."

"Huh?"

"Chev is flying to Rockingham, not Perth." Horlig watched me carefully.

"You knew? What's he going to do—"

"I know because he's doing the job at my suggestion. I've identified the abos who blew up our ammo warehouse last year. Some of the ringleaders are Rockingham city officials. I'm going to make an example of them." He paused, then continued grimly, as if daring me

to object. "By tomorrow at this time, every tenth inhabitant of Rockingham will be dead."

I didn't say anything for a second. I couldn't. When I finally got my mouth working again, I said with great originality, "You just can't do this, Horlig. We've had a lot more trouble from the Sudamericans and the Zulunders than we've ever had from the Australians. Killing a bunch of Aussies will just prove to everyone that Mikins don't want peace. You'll be encouraging belligerence. If you really have proof that these Rockingham officials are Merlyn's Men, you should send Chev out to arrest just those men and bring them back here for some sort of Company trial. Your present action is entirely arbitrary."

Horlig sat back in his chair. There was a new frankness and a new harshness in his face. "Perhaps I just made it all up. I'll fabricate some proof too, when necessary."

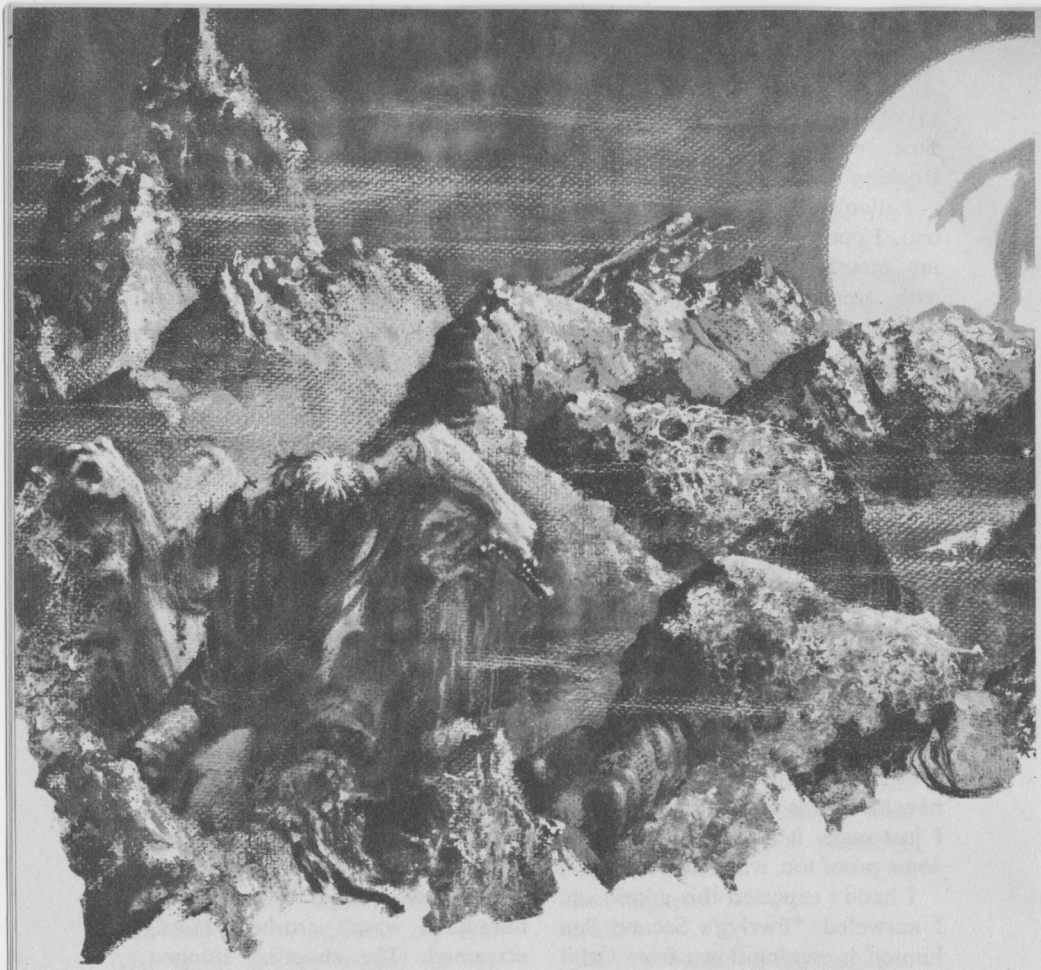
I hadn't expected this admission. I answered. "Pwrlyg's Second Son himself is coming down from Orbit tomorrow morning. Perhaps you thought he wouldn't know of your plans until they were executed. I don't know why you are doing this, but I can tell you that the Second Son is going to hear about it the minute he gets off the landing craft."

Horlig smiled pleasantly. "Get out."

I turned and started for the door. I admit it: I was going soft in the brain. My only excuse is that I had been associating with the natives too long. They generally say what they think because they have the protection of an impartial and all-powerful police force. This thought occurred to me an instant before I heard the characteristic sound of wrist gun smacking into palm. I dived madly for the floor as the first 0.07 mm dart hit the right boulder of the door hole. The next thing I knew I was lying in the cubbyhole formed by two or three large boulders knocked loose by the blast. My left arm was numb; a rock splinter had cut through it to the bone.

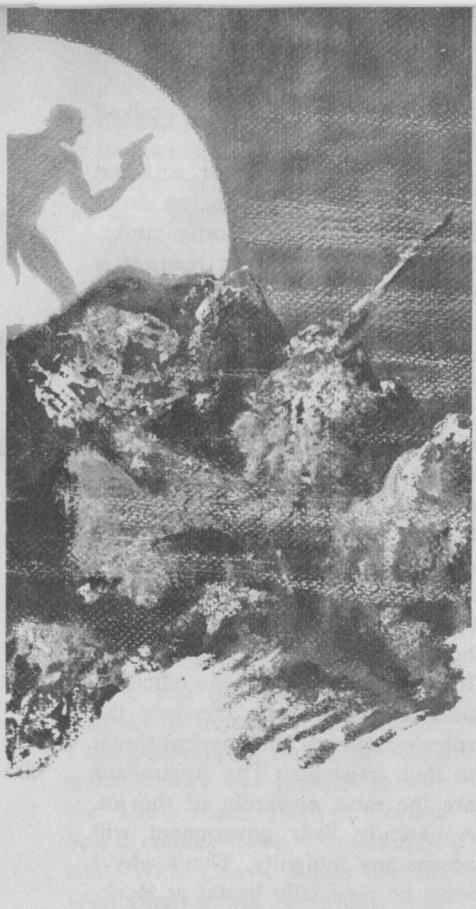
In the next couple seconds, Horlig fired about twenty darts wildly. The lights went out. Rocks weighing many tons flew about. The rock nest had been designed for stability, but this demolition upset the balance and the whole pile was shifting into a new configuration. It was a miracle I wasn't crushed. Horlig screamed. The shooting stopped. Was he dead? The man was nuts to fire more than a single dart indoors. He must have wanted me pretty bad.

As the horrendous echoes faded away, I could hear Horlig swearing. The pile was unrecognizable now. I could see the sky directly between gaps in the rocks. Moonlight came down in silvery shafts through suspended rock dust. Half-human shapes seemed to lurk in the rub-



ble. I realized now that the nest was much bigger than I had thought. To my left an avalanche of boulders had collapsed into some subterranean space. The surface portion of the nest was only a fraction of the total volume. Right now Horlig could be right on the other side of a nearby rock or one hundred meters away—the pile shift had been that violent.

"You still kicking, Melmwn, old man?" Horlig's voice came clearly. The sound was from my right, but not too close. Perhaps if I moved quietly enough I could sneak out of the pile to my air car. Or I could play dead and wait for morning when Horlig's employees came out. But some of those might be partners in Horlig's scheme—whatever it was. I decided to try the first plan.



I crawled over a nearby boulder, made a detour around an expanse of moonlit rock. My progress was definitely audible—there was too much loose stuff. Behind me, I could hear Horlig following. I stopped. This was no good. Even if I managed to make it out, I would then be visible from the pile, and Horlig could shoot me down. I would have to get rid of my opponent before I could escape. Besides, if he got away safely, Horlig could have Chev's sentries bar me from the landing field the next day. I stopped and lay quietly in the darkness. My arm really hurt now, and I could feel from the wetness on the ground that I had left a trail of blood.

"Come, Melmwn, speak up. I know you're still alive." I smiled. If Horlig thought I was going to give my position away by talking, he was even crazier than I thought. Every time he spoke, I got a better idea of his position.

"I'll trade information for the sound of your voice, Melmwn." Maybe he was not quite so nuts after all. He knew my greatest failing: curiosity. If Horlig should die this night, I might never know what his motives were. And I was just as well armed as he. If I could keep him talking I stood to gain just as much as he.

"All right, Horlig. I'll trade." I had said more than I wanted to. The shorter my responses the better. I listened for the sound of movement. But all I heard was Horlig's voice.

"You see, Melmwn, I am Merlyn." I heard a slithering sound as he moved to a new position. He was revealing everything to keep

me talking. Now it was my turn to say something.

"Say on, O Horlig."

"I should have killed you before. When you overheard my conversation with Chev, I thought you might have guessed the truth."

I had received a lot of surprises so far, and this was another. Horlig's treatment of Chev's genocide scheme had seemed proof that Horlig couldn't be Merlyn. "But why, Horlig? What do you gain? What do you want?"

My opponent laughed, "I'm an altruist, Melmwn. And I'm a Gloyn; maybe the last full-blooded Gloyn. The Terrans are not going to be taken over by you the way you took over my people. The Terrans are people; they are human—and they must be treated as such."

I guess the idea must have been floating around in my mind for weeks. The Terrans were human, and should be treated as such. Horlig's statement triggered the whole solution in my mind. I saw the essential error of the Cherokee and of all my previous plans to save the Terrans. Horlig's motive was a complete surprise, but I could understand it. In a way he seemed to be after the same thing as I—though his methods couldn't possibly work. Maybe we wouldn't have to shoot it out.

"Listen Horlig. There's a way I can get what you want without bloodshed. The Terrans can be saved." I outlined my plan. I talked for almost two minutes.

As I finished, a dart smashed into a boulder thirty meters from my position. Then Horlig spoke. "I will not accept your plan. It is just what I'm fighting against." He seemed to be talking to himself, repeating a cycle that played endlessly, fanatically in his own brain. "Your plan would make the Terrans carbon-copy Mikins. Their culture would be destroyed as thoroughly as mine was. It is far better to die fighting you monsters than to lie down and let you take over. That's why I became Merlyn. I give the rebellious Terran elements a backbone, secret information, supplies. In my capacity as a Mikin official, I provoke incidents to convince the spineless ones of the physical threat to their existence. The Australians are the most cowardly of the lot. Apparently their government will accept any indignity. That's why I must be especially brutal at Rockingham tomorrow."

"Your plan's insane," I blurted without thinking. "Pwrlyg could destroy every living thing on Earth without descending from orbit."

"Then that is better than the cultural assassination you intend! We will die fighting." I think he was crying. "I grew up on the last preserve. I heard the last stories. The stories of the lands and the hunting my people once had, before you came and killed us, drove us away, talked us out of everything of value.

If we had stood and fought then, I at least would never have been born into the nightmare that is your world." There was silence for a second.

I crept slowly toward the sound of his voice. I tucked my left arm in my shirt to keep it from dragging on the ground. I guessed that Horlig was wounded too, from the slithery sound he made when he moved.

The man was so involved in his own world that he kept on talking. It's strange, but now that I had discovered a way to save the Terrans, I felt doubly desperate to get out of the rock-nest alive. "And don't, Melmwn, be so sure that we will lose to you this time. I intend to provoke no immediate insurrection. I am gathering my forces. A second robot factory was brought in with the Third Fleet. Pwrlyg's Second Son is coming down with it tomorrow. With Chev's forces on the West Coast it will be an easy matter for Merlyn's Men to hijack the factory and its floater. I already have a hidden place, in the midst of all the appropriate ore fields, to set it up. Over the years, that factory will provide us with all the weapons and vehicles we need. And someday, someday we will rise and kill all the Mikins."

Horlig sounded delirious now. He was confusing Gloyn and Terran. But that robofactory scheme was not the invention of a delirious mind—only an insane one. I continued across the boulders—under and around them. The moon was directly overhead and its light illuminated isolated patches of rock. I knew I was quite near him now. I stopped and inspected the area ahead of me. Just five meters away a slender beam of moonlight came down through a chink in the rock overhead.

"Tomorrow, yes, tomorrow will be Merlyn's greatest coup."

As Horlig spoke I thought I detected a faint agitation in the rock dust hung in that moonbeam. Of course it might be a thermal effect from a broken utility line, but it could also be Horlig's breath stirring the tiny particles.

I scrambled over the last boulder to get a clear shot that would not start an avalanche. My guess was right. Horlig sprang to his feet, and for an instant was outlined by the moonlight. His eyes were wide and staring. He was a Gloyn warrior in shin boards and breechclout, standing in the middle of his wrecked home and determined to protect his way of life from the alien monsters. He was only four hundred years too late. He fired an instant before I did. Horlig missed. I did not. The last Gloyn disappeared in an incandescent flash.

I was in bad shape by the time I got out to my car and called a medic. The next couple hours seem like someone else's memories. I woke the Ump at 0230. He wasn't disturbed by the hour; Umpires can

take anything in stride. I gave him the whole story and my solution. I don't think I was very eloquent, so either the plan was sharp or the Ump was especially good. He accepted the whole plan, even the ruling against Pwrlyg. To be frank, I think it was a solution that he would have come to on his own, given time—but he had come down from the Orbital Base the week before, and had just begun his study of the natives. He told me he'd reach an official decision later in the day and tell me about it.

I flew back to my office, set all the protection devices on auto, and blacked out. I didn't wake until fifteen hours later, when Ghuri Kym—the Ump—called and asked me to come with him to Adelaide.

Just twenty-four hours after my encounter with Horlig, we were standing in Robert Dahlmann's den. I made the introductions. "Umpire Kym can read Australian but he hasn't had any practice with speaking, so he's asked me to interpret. Scholar Dahlmann, you were right about Herul Horlig—but for the wrong reasons." I explained Horlig's true motives. I could see Dahlmann was surprised. "And Chev's punitive expedition to the West Coast has been called off, so you don't have to worry about Rockingham." I paused, then plunged into the more important topic. "I think I've come up with a way to save your species from extinction. Ghuri Kym agrees."

Kym laid the document on Dahlmann's desk and spoke the ritual words. "What's this?" asked Dahlmann, pointing at the Mikin printing.

"The English is on the other side. As the representative of the Australian government, you have just been served with an antitrust ruling. Among other things, it directs your people to split into no fewer than one hundred thousand autonomous organizations. Ngagn Chev is delivering similar documents to the Sudamerican and Zulunder governments. You have one year to effect the change. You may be interested to know that Pwrlyg has also been served and must split into at least four competitive groups."

Pwrlyg had been served with the antitrust ruling that morning. My employers were very unhappy with my plan. Kym told me that the Second Son had threatened to have me shot if I ever showed up on Company property again. I was going to have to lay low for a while, but I knew that Pwrlyg needed all the men they could get. Ultimately, I would be forgiven. I wasn't worried; the risk-taking was worth while if it saved the Terrans from exploitation.

I had expected an enthusiastic endorsement from Dahlmann, but he took the plan glumly. Kym and I spent the next hour explaining the details of the ruling to him. I felt distinctly deflated when we left. From the Terran's reaction you'd

think I had ordered the execution of his race.

Mary was sitting on the porch swing. As we left the house, I asked Kym to return to the Base without me. If her father hadn't been appreciative, I thought that at least Mary would be. She was, after all, the one who had given me the problem. In a way I had done it all for her.

I sat down on the swing beside her.

"Your arm! What happened?" She passed her hand gently over the plastic web dressing. I told her about Horlig. It was just like the end of a melodrama. There was admiration in her eyes, and her arms were around me—boy gets girl, et cetera.

"And," I continued, "I found a way to save all of you from the fate of the Cherokee."

"That's wonderful, Ron. I knew you would." She kissed me.

"The fatal flaw in the Cherokee's plan was that they segregated themselves from the white community, while they occupied lands that the whites wanted. If they had been citizens of the United States of America, it would not have been legal to confiscate their lands and kill them. Of course we Mikins don't even have a word for 'citizen,' but Umpire law extends to all humans. I got the Umpire to declare that Terrans are a human species. I know it sounds obvious, but it just never occurred to us before.

"Genocide is now specifically barred, because it would be monopolistic. An antitrust ruling has already been served on Australia and the other Earth governments."

Mary's enthusiasm seemed to evaporate somewhat. "Then our governments will be abolished?"

"Why, yes, Mary."

"And in a few decades, we will be the same as you with all your . . . perversions and violence and death?"

"Don't say it that way, Mary. You'll have Mikin cultures, with some Terran enclaves. Nothing could have stopped this. But at least you won't be killed. I've saved—"

For an instant I thought I'd been shot in the face. My mind did three lazy loops, before I realized that Mary had just delivered a roundhouse slap. "You green-faced thing," she hissed. "You've saved us nothing. Look at this street. Look! It's quiet. No one's killing anyone. Most people are tolerably happy. This suburb is not old, but its way of life is—almost five hundred years old. We've tried very hard in that time to make it better, and we've succeeded in many ways. Now, just as we're on the verge of discovering how all people can live in peace, you monsters breeze in. You'll rip up our cities. 'They are too big' you say. You'll destroy our police forces. 'Monopolistic enterprise,'

you call them. And in a few years we'll have a planet-wide Clowntown. We'll have to treat each other as animals in order to survive on these oh-so-generous terms you offer us!" She paused, out of breath, but not out of anger.

And for the first time I saw the real fear she had tried to express from the first. She was afraid of dying—of her race dying; everybody had those fears. But what was just as important to her was her home, her family, her friends. The shopping center, the games, the theaters, the whole concept of courtesy. My people weren't going to kill her body, that was true, but we were destroying all the things that give meaning to life. I hadn't found a solution—I'd just invented murder without bloodshed. Somehow I had to make it right.

I tried to reach my arm around her. "I love you, Mary." The words came out garbled, incomprehensible. "I love you, Mary," more clearly this time.

I don't think she even heard. She pushed away hysterically. "Horlig was the one who was right. Not you. It is better to fight and die than—" she didn't finish. She hit frantically and inexpertly at my face and chest. She'd never had any training, but those were hard, determined blows and they were doing damage. I knew I couldn't stop her, short of injuring her. I stood up under that rain of blows and made for the steps. She followed, fighting, crying.

I stumbled off the steps. She stayed on the porch, crying in a low gurgle. I limped past the street lamp and into the darkness. ■

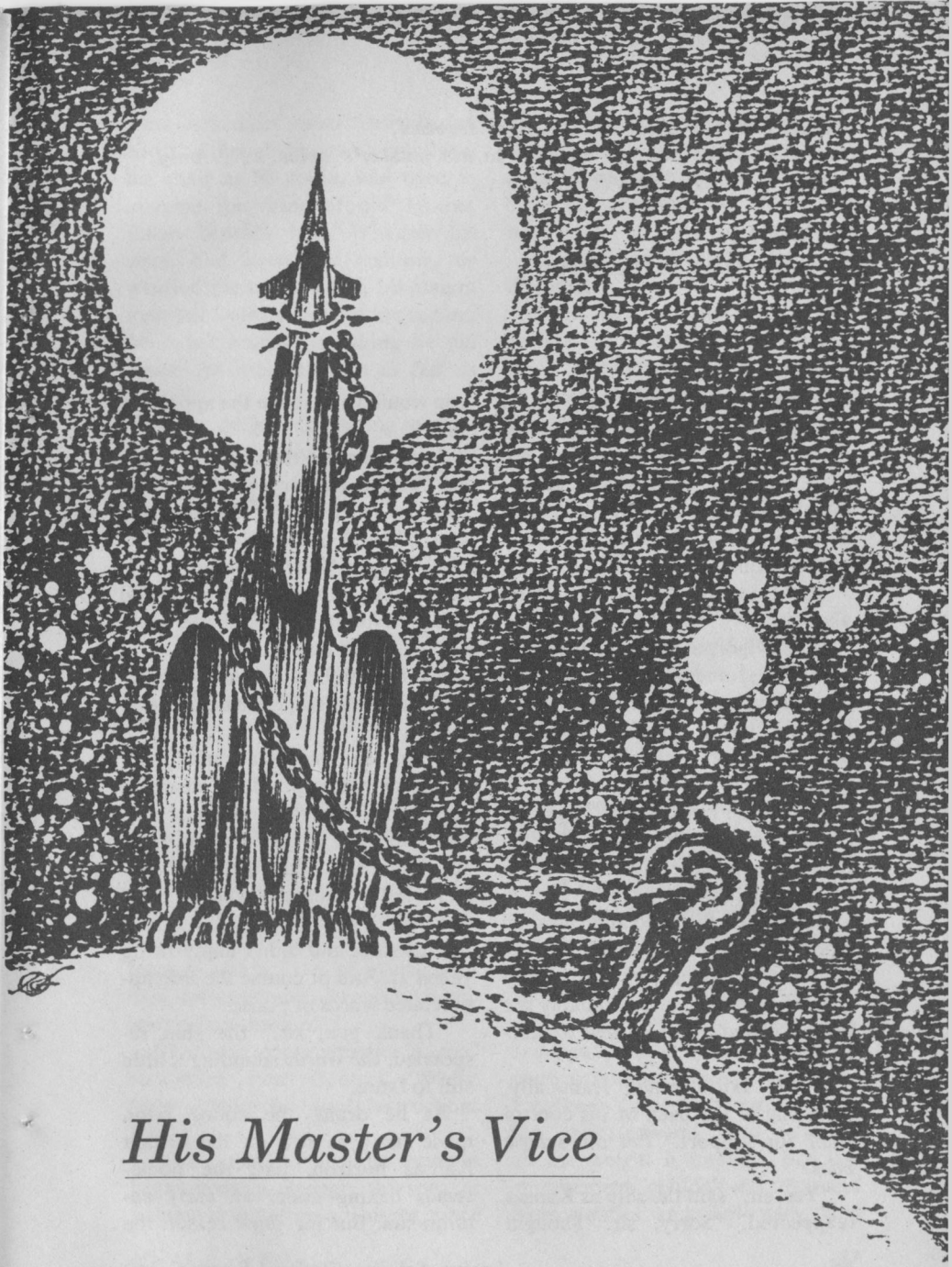
(continued from page 49)

The Space Force had some original ways of getting things that needed doing done; that very trick spaceship was, for example, simply a recruiting booth, so to speak. And now our "royal" friends, demoted to recruits, encounter a really masterful example of Space Force chicanery.

The Royal Road is simply a road. Well engineered, well built, a vital and highly useful highway—a free gift to economically depressed kingdoms.

And the thing makes the Trojan Horse look stupid and ineffectual by comparison—as a kingdom-destroyer!

Question for your consideration: How can giving a nation a fine highway—paid for in cash by the donor!—destroy the recipient completely? ■ *The Editor.*



His Master's Vice

ROLLO was a good and faithful servant; like a faithful dog, he reacted to his master's voice . . . only, sadly, ROLLO didn't stop there . . .

VERGE FORAY

ILLUSTRATED BY KELLY FREAS

His ship roused Elmo Ixton out of deepsleep to the customary view of broad Kansas prairie, but he felt more uneasier than usual. Maybe the sleep hadn't been deep enough to keep his subconscious knocked out the entire two weeks.

The thing to do was not think about it.

With vigorous movements, and with cheerfulness intended to fool himself, he bounced out of the sleep-tank and began exercising. "Schedule and coffee, *Rollo,*" he said between bends.

"Yes, sir, Proxad Ixton," the ship responded snappily. "Planetfall on Roseate in seventeen minutes. Coffee coming right up, sir."

The prairie flickered and vanished from the holophane bulkheads, to be replaced by a view of nearby space with what was presumably the planet Roseate floating low to starboard.

"NO!" Ixton yelled frantically, clutching at the back of his control chair for support. *"Put the prairie back!"*

"Yes, sir," said the ship as Kansas reappeared. "Sorry, sir. Thought you would want to see the approach, sir."

Ixton clung to the chair, stiffened his back to military erectness, and tried to push the terror from the spot where it nestled one inch behind his eyes. "Not this time, *Rollo,*" he managed to say in a strangled voice. "Nothing I could see from out . . . from here . . . would be of concern to my duties on Roseate."

"Very well, sir. Here's your coffee, sir."

Ixton sank into the chair. With shaking hand he lifted the steaming cup from the serving pedestal that had risen out of the lounge deck. He sipped and said, "Excellent coffee, *Rollo*. Creamed and sugared just right," *Rollo*, after all, had feelings of sorts and didn't enjoy being yelled at. And of course the ship appreciated words of praise.

"Thank you, sir," the ship responded, the words sounding a little stiff to Ixton.

As he drank the coffee Ixton made his eyes rest on the distant Kansas horizon, past the homesteads baking under an early autumn sun. But for some reason the

view lacked its usual tranquilizing effect, although he sat as solidly in his chair as he could, and tried to imagine the mass of old Mother Earth beneath him. Whether his sleep had been too shallow, or whether the toughness of his assignment on Roseate was getting to him, he didn't know. One thing he did know: he wanted *down* as fast as possible.

"Are you getting landing instructions yet?" he asked.

"No, sir."

"Why not?" he demanded, trying to keep anxiety out of his voice.

"I was awaiting your command, sir."

Damn! Ixton fumed to himself. Now I've got *Rollo* too skittish to flip a relay on his own hook! "O.K.," he said, "call Port Control for instructions. And let me talk to them, please."

"Roseate Control here!" barked a console speaker a few seconds later. "Receiving *PSS Rollo*. Go ahead."

"Hello, Port Control," replied Ixton. "This is Proxad Elmo Ixton, manning *PSS Rollo,* coming in for landing with a TUA of twelve minutes, forty seconds. Request landing instructions to ship."

"You can come straight in, sir," responded Port Control. "We've been waiting for you! Instructions follow."

As a series of blips and squawks began coming through, the speaker volume dropped to a whisper, since this was matter of no interest to Ixton. The man got up and paced the deck, feeling twitchy and wanting a cigarette, or something. Well, why not?

"Let me have a smoke, *Rollo,*" he directed.

"Yes, sir." A thin white tube pushed out of the serving pedestal. Ixton grabbed the lighted cigarette and took a deep drag. This relaxed him slightly, but he resumed pacing as he smoked.

At last he demanded, "Can't you shorten that TUA a couple of minutes, *Rollo?*"

"Yes, sir. I'll get us down as swiftly as possible, sir."

"Do that!" snapped Ixton.

He paced some more and tried to plan a course of action to follow once he landed. But all he could really do was try to imagine the various possibilities that might confront him. Gochster Garnet was far from an ordinary fugitive from justice. Not many years back Garnet had been a proxad in the Space Patrol himself—a competent proxad, and highly resourceful.

Ixton hoped to simply sit on the situation until Patrol reinforcements arrived—*if* the planet's officials would stand for that. Technically and legally, Ixton's authority on Roseate would be supreme—a Space Patrolman's title of "proxad" stood for "proxy admiral," and it carried all the weight it implied. But law enforcement couldn't be divorced from politics and diplomacy, and

part of Ixton's job was to avoid stirring anti-Patrol sentiment on Roseate, or any other world. And the planet had already been under total quarantine for two weeks, awaiting Ixton's arrival, and was doubtless indignant about it by now.

Ixton pushed the butt of his cigarette into the wastecatcher and stared out over the prairie. There ought to be a way to make holophane scenes more realistic, he fretted. The focus was clear enough, the depth was convincing, and the colors far more accurate than they had been when he was a kid twenty years ago. But there was still a dead giveaway in the falsity of the viewer's relationship to the view: the deck of his control lounge did not actually *attach* itself to the prairie scene. It could be taken as a thin sheet of metal nearly flush with the ground of the prairie, or it could be the top of a tall tower, or the surface of a flying platform he was riding, or . . .

He grabbed the back of the chair, swaying, and muttering angrily at himself.

"Pardon, sir?" asked *Rollo*.

"Nothing! Never mind! Just get us down from here!"

"Yes, sir. Only five more minutes, sir!"

"Cigarette!"

"Another, sir?"

"Yes, damn it, another! Quit dawdling "

The ship produced another cigarette for him and he sat down, glaring at the control console in front of the chair, not daring another look at the prairie scene.

The *PSS Rollo* dropped toward Roseate's port swiftly enough to produce a fairly spectacular meteor trail. If any fidgety planetary officials had been watching the approach on radar, they would have been most gratified by the haste with which the Patrol was coming to take the situation in hand.

The ship braked at the last possible second and came down with engines roaring. The shocktubes squealed painfully when the tripads banged on the plastcrete hardtop and the ship shivered to a halt.

"Touchdown, sir," said the ship.

"Touch" hardly seemed the word for it to Ixton, who had felt the thuds despite the paragravity field. But he had asked for it. He took a deep, jerky breath and said, "Very good, *Rollo*. Exterior view, please."

The prairie gave way to the unpretty sight of Roseate's spaceport, a wide expanse of empty and dirty plastcrete, marked here and there with crash-depressions and cargo-spillage stains. The Port Control building stood half a mile away, and beyond it he could see in the distance the outskirts of Roseate City —the planet's principal town with some three hundred thousand souls.

Of course the lounge deck did not attach itself to this view any more definitely than it had to the prairie, but this was unimportant. Ixton

knew this scene was for real, that old *Rollo* was squatting firmly in the middle of that ugly plastcrete. The knowledge was vastly comforting.

"Link into local communications," he directed.

"Yes, sir," said *Rollo,* and a moment later the console screen lighted to show a young woman visiphone operator. "Yes, sir?" she echoed *Rollo's* words.

"I'm Proxad Elmo Ixton of the Space Patrol. Put me through to the Governor."

"Right away, Proxad Ixton, and welcome to Roseate," she said with businesslike coquetry.

Ixton gazed sternly at her, and she got busy. "Here's Governor Drake, sir."

Drake had the heavy face and alertness of eye that, Ixton supposed, had been displayed by the majority of politicians since ancient Babylon. He beamed, "Welcome to Roseate, Proxad—"

"Ixton," the Patrolman supplied. "Elmo Ixton. Thank you, Governor Drake. I want to confer with you and the planetary police chief as quickly as possible, Governor, and for a number of reasons it would be desirable to hold the meeting here, in my ship. I hope that isn't too much of an imposition . . ."

"Oh, no!" said the governor with a quickly concealed flicker of annoyance. "Hassbruch and I will be there within an hour! As you can well imagine, Proxad Ixton, we're anxious to clear up this situation immediately, and you can count on our fullest cooperation "

"I appreciate that, Governor. I'll be waiting."

Ixton knew he had not handled the governor very diplomatically, but he realized, too, that he had very little talent along those lines. There was too much stiff funlessness in Ixton's makeup for people to warm to him easily. Even among his colleagues of the Patrol he was usually the man who stood silent and alone at the fringe of the crowd. Of course his fear of space and height —the reason why he spent his flight-time in the oblivion of deepsleep— made him more shy and withdrawn than he might have been. But even without that unremediable weakness, he would have remained a stiffneck, and he knew it. That was his personality, and he was stuck with it.

But there were advantages. Perhaps he was short on friends, but people did have confidence in him. He was known as a "tough cop."

"More coffee, sir?" asked the ship.

"Not now, *Rollo,"* he said. Being on firm ground he felt much better, so after a moment he added, *"Rollo,* I regret the way I behaved as we were coming in. I've told you the reason for it before—this unreasonable, uh, *tension* I sometimes experience when I'm in a high place. I'm afraid I can't explain it to you very clearly."

"Never mind, sir," said the ship. "I understand perfectly."

Ixton frowned at the response. That was laying it on pretty thick, after all! *Rollo,* with his compucortex, saying he could "understand perfectly" a human mental malfunction! Was *Rollo patronizing* him? But of course *Rollo* meant well, and it wouldn't do to take exception to the remark. But Ixton was deeply irked, nevertheless.

"One question I would like to ask, sir," said *Rollo.*

"Shoot," Ixton replied.

"In view of this condition, sir, why do you remain on active Patrol duty rather than accept a post that would keep you on the ground?"

"Because my work is important . . . and I can do it well. Also, except for the travel, which I can sleep through, I find the discharge of my duties most gratifying."

The ship considered that for a moment before responding, "May I say, sir, that you are a highly courageous person to proceed with your work despite your condition."

Definitely patronizing! Well, perhaps that was to be expected, Ixton admitted. The overt attitude of a Patrol ship to its proxad took whatever form the proxad found desirable. Since Ixton felt comfortable in a strict, semimilitary atmosphere, he had set a tone of formal courtesy with *Rollo*—the relationship between an officer and an enlisted man. And enlisted men were notorious for patronizing officers!

It was a flaw in the man-ship gestalt that he would have to accept, Ixton supposed.

"Thank you, *Rollo,"* he said coldly. "Now let's monitor the local newscasts for any information on our quarry."

But he learned nothing of importance concerning Gochster Garnet before the governor and police chief arrived. He met with them in the conference chamber on *Rollo's* third deck.

The perfect lie detector would be, of course, a dependable telepath, but that seemingly was a contradiction of terms. Such agencies as the Space Patrol fell back on detection equipment similar in principle to the ancient polygraph, but far more sophisticated in application. That used by Ixton could monitor, via an intricate microdar system, the slight local fluctuations of blood pressure within a subject's brain during interrogation—fluctuations that reflected closely the emotional state of the interviewee.

The microdar monitor was highly portable. Ixton could carry it about in a small satchel. He could have taken it to the offices of the governor and the police chief to conduct his interviews. But when a man of Gochster Garnet's talents and inclinations had been running loose on Roseate for over two years, Ixton could not be sure there was still an honest high official on the planet! It could be fatally indiscreet

for him to step outside the protection of his ship until he had some idea of who he could trust.

He seated the two officials where the unseen microdar scanners could examine them, and went behind his desk to watch the play of colors on their monitor lights.

"Gentlemen," he began, "the Patrol's job is to apprehend Gochster Garnet *on this planet*. It took years of gathering and sifting information to track him here. If he gets off Roseate, all that work will have to be repeated. Thus, it is essential that we keep Garnet cornered here until he is taken, or killed."

"If he's here at all!" groused Police Chief Hassbruch, "which you can't prove by me! And I think I know what's going on on this planet! It's my job to know!"

"I appreciate your attitude," said Ixton—which he did, because the deep greening of Hassbruch's monitor light showed no trace of deception. "But the Patrol's CIP system has all the conservatism of the typical heavy computer. When it finds a ninety-five per cent probability that Garnet is on your planet, you can bet the real probability is one hundred per cent! And he won't merely be hiding. He'll be up to something —with your criminal element, or your political malcontents, or . . ."

"I question that!" broke in Governor Drake. "Chief Hassbruch knows our criminal element, and I know our political soreheads! If somebody like Garnet was stirring up the snakes, you can bet your boots one of us would be wise to it!"

Another honest response, Ixton noted with relief.

"Don't be insulted, gentlemen," he said, "when I answer your doubts by saying that Garnet is cleverer than either of you. He's cleverer than I, for that matter. He's here, and he's up to something! But he's keeping his tracks covered. If he's not organizing the criminals or the malcontents, maybe he's undermining your own associates. How sure are you gentlemen that all your own men are still trustworthy?"

Hassbruch's light glimmered purple, and his face verified his uncertainty.

"How about it, Chief Hassbruch?" Ixton prompted.

"Well . . . there's one man, a sergeant of the old school. I've had him on the carpet a few times. His name's Jacobsen."

"I'd like to talk to him a little later," said Ixton.

The rest of the interview was devoted mainly to Ixton's attempt to convince the planetary officials that more Patrolmen should be awaited before an effort was made to take Garnet. A cruiser, manned by three proxads, was due to arrive in five days.

But Governor Drake blustered, and his monitor light glowed blood-red.

"What's the Patrol trying to do, starve us?" he bellowed. "This quarantine's costing us eighty million

credits a day, and that's the gross profit figure! What's more, the cost gets worse the longer it lasts! My people won't stand for another week of this waiting!"

"I understand your position," said Ixton patiently, "and I regret the cost of the quarantine. But—"

This was not the kind of argument Ixton was good at winning. Drake threatened political reprisals against the Patrol if the Garnet affair were dragged out, and cited the powerful Earth friends of Roseate who would take up the cudgel in the planet's behalf. He did not neglect the point that Gochster Garnet was the Patrol's own rotten apple, and that he therefore should be dealt with without inconvenience to the civilian public.

Ixton had answers to Drake's arguments, but they were not answers that would change the governor's mind. So he had to accept defeat.

He was in a grumpy frame of mind as he rode into Roseate City with the two officials. Drake was taken to Government Center, and Ixton went on to Police Headquarters with Hassbruch. He set up shop in one of the interrogation rooms, and the chief brought Sergeant Jacobsen in for questioning.

It took only a few minutes to determine that Jacobsen was indeed a cop of the old school—heavyhanded, but intensely loyal and genuinely concerned about his inability to understand Hassbruch's more modern philosophy of law enforcement. Though the sergeant was fifteen years older and eighty pounds heavier than Proxad Ixton, the Patrolman felt a definite sense of indentification with him.

"Do you know of any disloyalty on the police force?" Ixton asked him.

The microdar monitor revealed the same uncertainty on Jacobsen' part that Hassbruch had shown earlier.

"If you don't *know* of any, do you *suspect* any?" prompted Ixton.

"Well, there are men on the force I don't have much personal confidence in," Jacobsen admitted grudgingly.

"Such as who?" asked Ixton.

Jacobsen hemmed and hawed until Hassbruch broke in with obvious annoyance.

"I know he's referring to Lieutenant Wales!" he grated. "Wales is a younger man who was promoted past him, much to Jacobsen's resentment! A very good man!"

"Is that right, Sergeant?" asked Ixton.

Jacobsen nodded glumly.

"Why do you suspect him?"

"Well, maybe it's just that he ain't my kind of policeman, sir. But since he's had charge of recruitment, he's brought in a lot of young men whose talk I don't like."

After a moment of thought, Ixton said, "Thank you, Sergeant. As you know, I'm here on a job that could be tough and dangerous, and

I'll probably need police assistance before it's over. If I do, I hope you'll be working with me."

A surprised look of pleasure creased the sergeant's face. "I hope so, too, sir!" he replied.

"That's all for now," said Ixton. The sergeant saluted and marched out of the room. "Could we have Lieutenant Wales in next, Chief?"

Still peeved, Hassbruch shrugged. "Sure. I'll get him." He went out and returned with a tall, snappy young man who favored Ixton with a bright smile and a firm handshake.

"This is a rare honor, Proxad Ixton!" Lieutenant Wales said warmly, "simply to *meet* a man of your accomplishments, much less to have the privilege of working with you in some small way!"

Ixton was glad nobody had a microdar monitor on *him,* to read his disgust. *Rollo's* simple-minded patronizing was annoying enough. But this Wales was a bootlicker! Perhaps Chief Hassbruch went for that kind of line . . .

"Thank you, Lieutenant," he answered frostily. "Won't you have a seat, please."

As soon as Wales sat, and came into the focus of the scanner, the monitor light glowed a definite yellow. Ixton sighed, and unobtrusively fumbled with the catch of his satchel, to turn on the lashback transmitter.

"Lieutenant, what can you tell me about Gochster Garnet?" he asked.

"Nothing at all, I'm sorry to say, sir."

"You've never met him?"

"No, sir."

Each answer had produced an accusatory orange glow on the monitor. Ixton turned up the lashback power, and Wales rubbed his temples lightly.

"You have neither met him nor talked to him on the phone?"

"Definitely not, sir," Wales grimaced with the pain his answer bounced back into his head. Looking puzzled and a little sick, he tried to temporize: "Of course, one can't always be sure of the identity of people on the phone, so perhaps without knowing—" He shut up and clenched his teeth.

"What's wrong with you, Lieutenant?" barked Hassbruch.

"A . . . a slight headache, sir," muttered Wales.

"Oh? Sorry to hear that. Proxad, perhaps we could talk to Wales when he's feeling better."

"There's nothing wrong with Wales," Ixton growled, "that honest answers to my questions won't cure! Let's start at the beginning. Tell me about Garnet, Wales!"

"But I told you I know noth . . . !" He clamped his head in his arms and appealed frantically to Hassbruch. "Chief, I don't know what this . . . this *sadist* is doing to me, but he's using *torture!* Surely, sir, you're not going to allow him to do this to one of your most loyal . . . *OW!*"

"That's the biggest lie yet, isn't it Wales?" Ixton remarked. "Just how disloyal are you?"

"I'm not . . . *STOP IT!"* Wales screamed. He leaped from the chair and bolted for the door, but Hassbruch grabbed him by the collar and yanked him back. The chief's face was suddenly purple with rage.

"Sit down!" he roared, shoving Wales into the chair and turning to Ixton. "Proxad, I don't know what you're up to, but . . . well, you *are* a proxad, and that means something! And I don't like the way Wales reacted to that last question!"

"Neither do I, and neither did he!" Ixton replied grimly. "Start talking, Wales! Tell us about Garnet, and what you're doing for him!"

Slowly, the truth came out of the lieutenant: the location of Garnet's fortified hideout in the mountains, the names of Wales' confederates on the police force, their plans for infiltrating and seizing the government of Roseate with Garnet masterminding behind the scenes, the disposal through trade channels of certain "hot" valuables Garnet had brought with him to the planet, and so on for a couple of hours.

The disclosures kept Police Headquarters hopping the rest of the day, getting witnessed confessions, running down suspects in other government departments, and more interrogations than Ixton could keep track of.

Late in the evening Ixton sat in Hassbruch's office having a final cup of coffee with the chief.

"What surprises me," said a dazed Hassbruch, "is that none of our criminal big shots were involved with Garnet in this. They have talent he could use!"

"I expected that, myself," Ixton nodded. "It would fit Garnet's MO. But Wales told us Garnet refused his offers to put him in touch with your racketeer crowd, saying that criminal types weren't trustworthy! Maybe Garnet has learned through experience, and has changed his MO. He's a clever guy, after all."

The chief shook his head doubtfully, but said nothing. Ixton almost smiled. Having proved so inept a judge of character in Wales' case, Hassbruch was now very reticent about voicing his opinions. The day had left him a wiser man.

"I'll be going after Garnet tomorrow," Ixton said. "I'd like Sergeant Jacobsen and three other officers of his choosing to back me up. And if you have forest rangers on Roseate—men who know their way around in those mountains—I could use a couple of them, too."

"I'll arrange it," said the chief. "Also, I'll assign you a couple of armored clopters to fly you—"

"No clopters!" said Ixton quickly. "We'll go in by land because . . . because Garnet won't expect that."

"Good thinking!" applauded the chief.

Thinking, Ixton admitted to himself, had nothing to do with it!

The next day he wondered painfully if the clopters really could have been worse.

Garnet's hideout was less than fifty miles from the city, and all but the last two could be covered, if rather bumpily and definitely frighteningly, by groundcar on the narrow loggers' roads. Still, Garnet's location was something of a pole of inaccessibility for a traveler on the ground. From the spot where they left the cars, there was no trail of any kind through the dense undergrowth, up and down the dizzying stone ledges, and across streams that gurgled between huge jumbles of boulders.

The two rangers had shaken their heads dolefully the moment Ixton showed them their destination on the map Wales had marked. And long before the expedition reached the hideout, the steep terrain had the proxad in a weak-kneed, depressed condition, with a strong foreboding of failure.

He was surprised by the ease with which Garnet was taken, once they arrived. The approach by ground had indeed been unexpected and unprepared-for. Garnet had been out in the open, inspecting his ack-ack implacements, when they crept up.

"You're covered by half a dozen guns, Garnet!" called Ixton, stepping into the open with leveled stunner. "Make it easy on yourself!"

Garnet stared, then slowly raised his hands. Ixton and Jacobsen stepped forward to frisk him thoroughly, and cuff his wrists behind him. The renegade was still a handsome man, with a neatly trimmed beard, but somewhat paunchy from inactivity.

"I can almost remember you, Proxad," he said lightly.

"The name's Elmo Ixton."

"Oh, sure!" Garnet grinned. "I place you now! The stick-in-the-mud sobersides! Still a true-blue upholder of status and legality, huh?"

Ixton's lips tightened and he kept silent.

"Damn!" grunted Garnet, giving him the once-over. "Did you get all those scratches and scrapes fighting through the bush? I hope you don't intend to drag me back the way you came!"

"No," said Ixton, making a quick decision. A clopter ride back to town would be frightening, but so would another hike over all that tilted countryside! And the ride would be mercifully brief. Besides, now that Garnet was captured, he had no tellable excuse for staying on the ground. "Jacobsen, have your men check those ack-ack controls to make sure they're not on automatic fire, and then radio for a couple of clopters."

"Yes, sir."

Ixton broke out his microdar kit and fixed the scanner on Garnet. The monitor light gleamed yellow.

"What do you have cached around here?" Ixton asked.

Garnet grinned but did not speak. Ixton turned on the lashback transmitter. "Start talking, Garnet!" he demanded.

A grimace of pain twisted Garnet's face, but he was an ex-Patrolman. He could stand up under torture—and he knew silence was the best defense against microdar.

Ixton shrugged. "Hassbruch's men can take this place apart a rock at a time," he said. "You'll gain nothing by keeping quiet. Why not do it the easy way?"

Garnet did not speak. The monitor light was flashing bursts of deep yellow, which meant he was trying to hide something of importance. But what, the proxad wondered.

"Clopter coming in!" Jacobsen sang out a few minutes later.

"Fine! That was quick work!" said Ixton distractedly, still staring at Garnet, who was sitting very quietly on a stump. The renegade's monitored reactions were definitely puzzling—no rage at being captured, no deep depression. Just an overall coolness, plus a determination to deceive, to give no hint concerning the nature of some secret. Garnet was motionless, gazing fixedly at the ground in front of him, as if a mere glance in the wrong direction would give something away. He did not even look up at the approaching clopter . . .

"Take cover quick!" Ixton yelled to his men. But the warning was not in time. A stun-gas bomb had been dropped from the clopter, to explode whitely a few feet above their heads. Ixton was not aware of passing out.

Consciousness returned in stages. He was still out in the bush, but not at the hideout. He was lying on the ground with bound wrists and ankles. Men were talking nearby, and he recognized Garnet's voice.

"That was part of the plan!" he was explaining to somebody. "The Patrol was *supposed* to get wise to Wales and his boys if I was located! Why do you think I went to such trouble to keep your organization completely separate from his? Wales was a mere distraction, a decoy, to keep the proxad too busy to come snooping after you guys in the rackets!"

"But if we ain't taking over, we gotta leave Roseate!" a rough voice objected.

"As poor as this planet's going to be for the next couple of decades," sneered Garnet, "you wouldn't want to stick around, anyway! They'll be a week finding out just how thoroughly their treasury has been raided! We'll be on our way to bigger and better things long before then!"

"On our way *how?*" the other demanded.

"Proxad Ixton will provide transportation—the kind of transportation I've wanted to use again for several years!" Garnet's voice came

closer, and a boot jarred Ixton's ribs. "Wake up and join the party, Ixton!" Garnet snapped. "You're aware by now "

Ixton opened his eyes to peer at Garnet and several other men. They were in a small forest clearing, alongside a grounded clopter.

"Have you got the gadget ready, Boddley?" Garnet asked.

"Yeah, Mr. Garnet," said a large, stolid-looking thug, stepping forward with a device held out for inspection. It was an old-fashioned bullet-pistol, the muzzle of which had been welded through a hole in a circular flexamet band.

"Show our friend here how it works," Garnet directed.

The man knelt beside Ixton, aimed the pistol at a nearby log, bent the flexomet band sideways out of the line of fire, and squeezed the trigger. Nothing happened.

"Surprised?" asked Garnet. "Now release the trigger, Boddley."

The man eased his finger up and the gun fired resoundingly. A shower of chips flew from the log.

"A simple but handy little device," Garnet grinned. "I dreamed it up, myself. Let's say that the band's around your head, Ixton, which it will be in a few minutes, and Boddley's behind you, holding the pistol, with the trigger pulled. He walks you into the clopter, we fly to the spaceport, board your ship, and take off with me in command. What can your ship do to stop us?"

A wave of defeat swept through Ixton, made more sickening by Garnet's references to flying in the clopter and taking off aboard *Rollo*. "I . . . don't know," he muttered. "Nothing I suppose. If I cooperate with you, which I won't."

"Oh, that's no problem! A few minutes of your own microdar lashback, at peak power and nondiscriminating, and you'll give up all thoughts of being a dead hero! Matt, untie him while Boddley puts the gadget on his head! We're moving out!"

Ixton's sight was clear by now, and he looked at Garnet again. As he suspected, the renegade had been using the microdar to check his reactions.

The clopter flight was uneventful, except that Ixton vomited once, which Garnet and his men found highly amusing. Think as hard as he might, Ixton could find no flaw in Garnet's scheme. The ship could not take action that would lead to Ixton's death, and that meant it could not attack his captors. If Boddley had to *pull* the trigger, *Rollo* could finish off the whole crew before the thug's finger could even twitch.

But there was no means by which *Rollo* could grasp that trigger and hold it tight if the finger loosened suddenly—either because Boddley was dead or because Garnet had ordered him to shoot. And the flexamet band was on too tightly for Ixton to slip free of it.

So they would board *Rollo,* Ixton would be forced to order the ship to take off, and Garnet would have ample time in which to tamper knowingly with the controls of the compucortex. The renegade would emerge as the ship's new master—and *Rollo* was a treasure far surpassing all the loot he had gathered on Roseate.

The clopter landed hard by the Patrol ship and Ixton was marched aboard.

"*Rollo*'s your name, huh?" remarked Garnet, who was close on Boddley's heels. "Well, *Rollo,* I hope you appreciate Proxad Ixton's predicament. In case you do not, let me inform you that the trigger of that pistol has been pulled. It will fire when the trigger is released. Do you comprehend?"

"Yes, former Proxad Garnet," said *Rollo.*

"What are you going to do about it?"

"I will continue to follow Proxad Ixton's orders, to the extent they are consistent with my directives," *Rollo* replied.

Garnet laughed. "Ixton's orders will be *my* orders!" He turned and called out the open hatchway, "O.K., men, get the stuff on board!"

Boddley made Ixton sit down on the floor of the central control room, and Garnet began examining the compucortex panels, while the loot was brought in and stored. Ixton asked, "What did you do with the others, back at the hideout?"

"Left them for Hassbruch to rescue," said Garnet. "No point in killing backwoods cops just for kicks, and they weren't bothering me."

"Thanks for that," said Ixton.

"As for you, I might decide to spare you the embarrassment of living this down," chuckled Garnet. "Now shut up."

A few minutes later the one called Matt reported, "All the stuff is on board, Mr. Garnet."

"O.K. Ixton, tell your ship to close the hatches and take off!"

"You heard the man, *Rollo,*" said Ixton, clinching his eyes shut and wishing he was in his sleeptank. "Close up and lift off."

After a brief hesitation, *Rollo* responded, "Yes, sir." The hatches clanged shut and the ship began lifting.

At an altitude of approximately twelve feet, the ship halted, and hung suspended over the plastcrete like a low-hovering clopter.

"Keep going up!" snapped Garnet.

"Keep climbing, *Rollo,*" relayed Ixton.

" . . . Yes, sir," said *Rollo* uncertainly. The ship went up another two feet, then quickly dropped back the same distance.

"Listen!" snarled Garnet. "I said get going! Off the planet! Ship, quit fooling around or Ixton gets a hole in his head!"

"I'm very sorry, former Proxad Garnet," said *Rollo,* "but it is not

possible to comply with your orders."

"Why not? What's wrong with my orders?"

"Nothing, former Proxad Garnet."

"Are you forbidden by a directive I don't know about?"

"Not to my knowledge, former Proxad Garnet."

"Damn!" grunted Garnet, whipping out the microdar and putting the scanner on Ixton. "Ixton," he barked accusingly, "what have you done to keep the ship from obeying?"

"Nothing," said Ixton.

"Well, what the hell's the holdup?"

"I don't know."

Garnet cursed and threw the microdar to the deck. "Some stinking wise guy at Patrol Grand Base must've hooked a special inhibitor into this bucket's guts—something specially for me! Well, I know these ships! I'll find it, never fear!" He yanked a panel off the motorcontrol bank and began checking connections furiously.

The others stood around watching him with worried expressions, mumbling among themselves. Boddley finally spoke up, "Uh, Mr. Garnet, will this slow you down much?"

"It'll take near all night, and maybe most of tomorrow!" growled Garnet. "You guys settle down! You're safe enough in here!"

"Sure, Mr. Garnet. It's not that. It's just that I can't hold this gun that long!"

"Oh? What's the matter?"

"My hand's already getting cramped. Why can't I let this guy have it, and—"

"No! With Ixton dead the ship would finish us off in two seconds! Hang on while I think of something!" Garnet stared concentratedly at Ixton.

"Try to make it quick, Mr. Garnet," urged Boddley.

"I believe I can disconnect a sleeptank from the ship's control, so that Ixton would die in it very quickly unless one of us tended him . . ." said Garnet.

"Now wait a minute!" objected Ixton crossly. "I don't want any deepsleep!" He hoped that *Rollo* got the meaning of his words, and would act upon them, while Garnet dismissed his objection as mere petulance.

"To hell with what you want!" snapped Garnet. *"Rollo,* where's the nearest sleeptank?"

"In the control lounge, former Proxad Garnet."

The renegade hurried up to the lounge and found the tank already elevated and waiting. With careless skill, he yanked loose the majority of the tubes, wires, and guides that linked tank to ship. "O.K., Boddley," he said, "let's get our boy in the bottle! Careful with the gun!"

Ixton cooperated. He climbed into the tank and stretched out on

his back with head turned sideways to accommodate the pistol and Boddley's hand. He felt the sting of the tank's hypos penetrating his skin, and he quickly dozed off.

But he could still hear Garnet talking!

"Loosen that band, Boddley, and I'll slide it free . . . Easy . . . O.K.! Let the bullet go into that thick cushion "

The pistol roared.

"He won't need any attention for fifteen minutes. Come along! I've got work for all of you to do!"

When he heard the men leave the room, Ixton opened his eyelids a crack and peered about. *"Rollo?"*

"Yes, sir."

"Am I all right?"

"Yes, sir. You made your wish to avoid deepsleep known in ample time for me to flush the drugs from the hypodermic feeds and refill them with water."

"But I dozed off for a second!"

"Force of habit, I suspect, sir. You are not drugged."

Carefully, Ixton climbed from the tank and discovered the ship was correct.

"Fine! Excellent work, *Rollo!* Now stun and confine Garnet and his men!"

"Yes, sir. Thank you, sir." After a short pause, the ship added, "The prisoners are now secure, sir."

"All right. Let's have some coffee—strong and black this time—and put in a call to Chief Hassbruch!"

The next few hours were busy, but routine. All the prisoners, except Garnet, were turned over to Hassbruch, as was the carefully inventoried and receipted loot—most of it unmarked Federation currency, good anywhere men did business. The quarantine on Roseate was lifted. Ixton put through a call to the approaching Patrol cruiser, still some three days away, and arranged a halfway rendezvous, to take place in thirty-eight hours. And he put his sleeptank back in order.

When his business on Roseate was concluded to the last detail, he ate a quick supper and headed for the tank.

"All set, *Rollo,"* he said. "Take off on course to rendezvous with the cruiser at the proper time."

"I'm sorry, sir, but that is not possible."

"What? What do you mean, impossible? The trouble's over, *Rollo!* Garnet's safely on ice in the prison compartment! Let's get started!"

"I have already tried, sir. But it is not possible."

"But . . . but there's no directive that could keep you here! And now that I think about it, Garnet's idea of an inhibitor slipped into your circuitry is ridiculous. Just what's the trouble, *Rollo?"*

"It's not easy to explain, sir," the ship replied. "But you see, sir, unlike yourself, I am not able to enter deepsleep while we are spaceborne, and . . . well, sir, it is not possible

for me to maintain myself in functioning condition at an altitude of more than twelve feet!"

Ixton sat down on the rim of the sleeptank, an utterly stunned expression on his face.

But it figures, he realized dazedly. The man-ship relation held the key, but he hadn't seen it before. Very luckily, he hadn't guessed the truth while Garnet had the microdar scanner on him!

Man and ship . . . officer and enlisted man . . . but far more basically, master and dog. The latter was the closest analogy of the man-ship relation, as delineated by the ship's directives. It required utter, worshipful, dog-like *devotion* of the Patrol ship for its proxad.

And certain actions accompany certain attitudes, almost anywhere those attitudes are found. Devotion is followed, highly predictably, by imitation. Perhaps this imitation is unconscious, unintended, undesirable. But it shows up just the same.

Wasn't it ancient common knowledge that the dog grows to resemble his master, to echo his vices as well as his virtues, his weaknesses as well as his strengths?

And Ixton remembered all too vividly the unparalleled severity of the height-jitters he had suffered when they were coming in for the landing on Roseate! And *Rollo* had said he "understood perfectly" what was troubling Ixton! The only way such a sensation could be understood perfectly was by sharing it!

"Put a call through to the cruiser, *Rollo*," he sighed. "Tell them they'll have to meet us here."

Which would leave him with the problem of explaining to his fellow proxads just how his spaceship happened to catch a severe case of acrophobia! ■

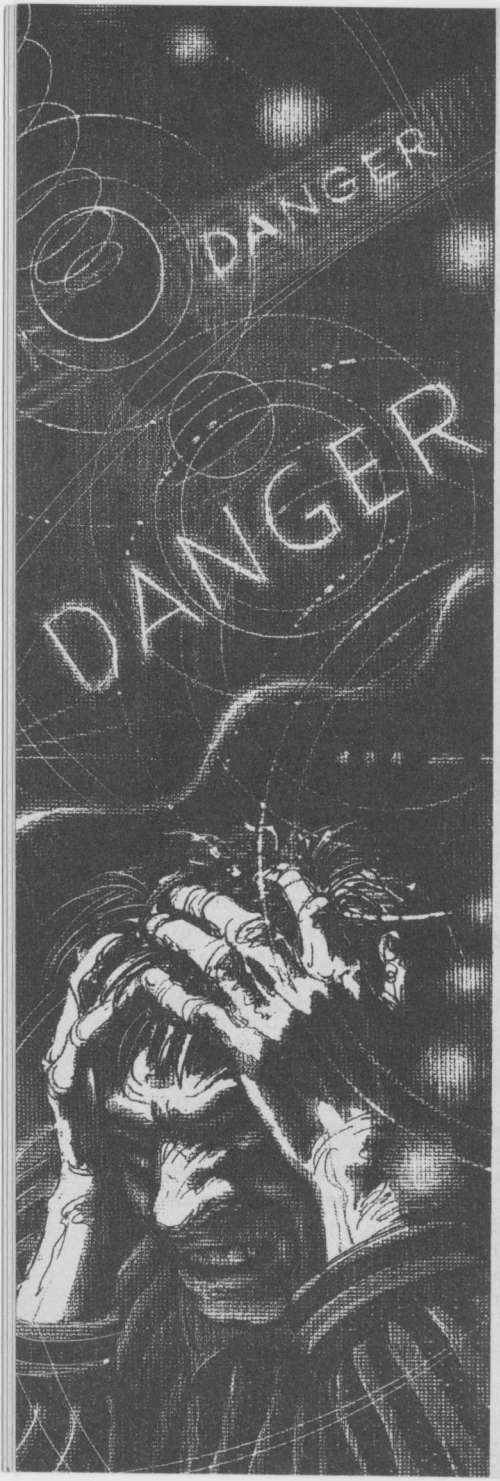
The Analytical Laboratory

The Lab is in two sections this month; the numerical scores are on Page 136 because of lack of space here.

The Lab this time was unusually heavy, because of the very large number of letters on Harry Stine's "Star Trek" article, and the overwhelming popularity of "The Horse Barbarians." Since we don't rate the fact articles on the same scale with the stories, Harry Stine's article doesn't show on the score table. Harrison's story, however, really walked off with First Place—for which Mr. Harrison undoubtedly thanks you Kind Readers, since first place on the An Lab scores means a bonus of 1¢ a word on this installment (at least!) or some $200 extra cash.

Your votes—by postcard, letter, or however—really have impact on authors; it's not just what *I* think that determines their earnings, but what you—the people who really pay their earnings—say.

Continued on page 136



Fear Hound

Some people can "smell" fear, and know it; others can only sense it without knowing whence it comes. And that was the city government's problem, for when people fear without understanding—!

KATHERINE MACLEAN

ILLUSTRATED BY KELLY FREAS

Hunger is not a bad thing. Some guys who knew Zen and jaine yogi had told me they could go without food thirty days. They showed me how. The only trouble is, when you skip meals, you shake. When I touched a building it felt like the world was trembling.

If I told the employment board that my student support money had run out, they'd give me an adult support pension and a ticket to leave New York and never come back. I wasn't planning on telling them.

Ahmed the Arab came along the sidewalk, going fast, his legs rangy and swinging. Ahmed used to be king of our block gang when we were smaller, and he used to ask

me to help him sometimes. This year Ahmed had a job working for the Rescue Squad. Maybe he would let me help him; maybe he could swing a job for me.

I signaled him as he came close. "Ahmed."

He went on by, hurrying. "O.K., George, come on."

I fell into stride beside him. "What's the rush?"

"Look at the clouds, man. Something's getting ready to happen. We've got to stop it."

I looked at the clouds. The way I felt was smeared all over the sky. Dangerous dark dirty clouds bulged down over the city, looking ready to burst and spill out fire and dirt. In high school Psychology-A they said that people usually see clouds and blots in shapes to match their mood. My mood was bad, I could see that, but I still did not know what the sky really looked like—dark, probably, but harmless.

"What is it?" I asked. "Is it smog?"

Ahmed stopped walking, and looked at my face. "No. It's fear."

He was right. Fear lay like a fog across the air. Fear was in the threatening clouds and in the darkness across the faces of the people. People went by under the heavy sky, hunched as if there were a cold rain falling. Buildings above us seemed to be swaying outward.

I shut my eyes, but the buildings seemed to sway out farther.

Last year when Ahmed had been training for the Rescue Squad he'd opened up a textbook and tried to explain something to me about the difference between inner reality and outer reality, and how mobs can panic when they all see the same idea. I opened my eyes and studied the people running at me, past me, and away from me as the crowds rushed by. Crowds always rush in New York. Did they all see the buildings as leaning and ready to fall? Were they afraid to mention it?

"Ahmed, you Rescue Squad fink," I said, "what would happen if we yelled Earthquake good and loud? Would they all panic?"

"Probably so." Ahmed was looking at me with interest, his lean face and black eyes intent. "How do you feel, George? You look sick."

"I feel lousy. Something wrong in my head. Dizzy." Talking made it worse. I braced my hand against a wall. The walls rocked, and I felt as if I were down flat while I was still standing up.

"What in creation is wrong with me?" I asked. "I can't get sick from skipping a meal or so, can I?" Mentioning food made my stomach feel strange and hollow and dry. I was thinking about death suddenly. "I'm not even hungry," I told Ahmed. "Am I sick?"

Ahmed, who had been king of our block gang when we were kids, was the one who knew the answers.

"Man, you've got good pickup." Ahmed studied my face, "Someone

near here is in trouble and you're tuned in to it." He glanced at the sky east and west. "Which way is it worst? We've got to find him fast."

I looked up Fifth Avenue. The giant glass office buildings loomed and glittered insecurely, showing clouds through in dark green, and reflecting clouds in gray as if dissolving into the sky. I looked along Forty-second Street to the giant arches of the Transport Center. I looked down Fifth Avenue, past the stone lions of the library, and then west to the neon signs and excitement. The darkness came at me with teeth, like a giant mouth. Hard to describe.

"Man, it's bad." I was shaken. "It's bad in every direction. It's the whole city!"

"It can't be," Ahmed said. "It's loud, we must be near where the victim is."

He put his wrist radio up to his mouth and pushed the signal button. "Statistics, please." A voice answered. "Statistics." Ahmed articulated carefully. "Priority call. Rescue Badge 54B. Give me today's trends in hospital admissions, all rises above sigma reciprocal 30. Point the center of any area with a sharp rise in"—he looked at me analytically—"dizziness, fatigue, and acute depression." He considered me further. "Run a check on general anxiety syndromes and hypochondria." He waited for the Statistics Department to collect data.

I wondered if I should be proud or ashamed of feeling sick.

He waited—lean, efficient, impatient, with black eyebrows and black intense eyes. He'd looked almost the same when he was ten and I was nine. His family were immigrants, speaking some unAmerican language, but they were the proud kind. Another person would burn with hate or love for girls, but Ahmed would burn about Ideas. His ideas about adventure made him king of our block gang. He'd lead us into strange adventures and grown-up no-trespassing places just to look at things, and when we were trapped he'd consult a little pack of cards, or some dice, and lead us out of trouble at high speed—like he had a map. He had an idea that the look and feel of a place told you its fate; a bad-luck place looked bad. When he consulted me, or asked me how a place looked to me, I'd feel proud.

He'd left us behind. We all dropped out in high school, but Ahmed the Arab got good marks, graduated and qualified for advanced training. All the members of our gang had taken their adult retirement pensions and left the city, except me and Ahmed the Arab—and I heard Ahmed was the best detector in the Rescue Squad.

The wrist radio whistled and he put it to his ear. The little voice crackled off figures and statistical

terms. Ahmed looked around at the people passing, surprised, then looked at me more respectfully. "It's all over Manhattan. Women coming in with psychosomatic pregnancy. Pregnant women are coming in with nightmares. Men are coming in with imaginary ulcers and cancers. Lots of suicides and lots of hospital commitments for acute suicidal melancholy. You are right. The whole city is in trouble."

He started along Forty-second Street toward Sixth Avenue, walking fast. "Need more help. Try different techniques." A hanging sign announced, *Gypsy Tea Room, Oriental Teas, Exotic Pastries, Readings of Your Personality and Future*. Ahmed pushed through a swinging door and went up a moving escalator two steps at a time, with me right after him. We came out into the middle of a wide, low-ceiling restaurant, with little tables and spindly chairs.

Four old ladies were clustered around one table nibbling at cupcakes and talking. A businessman sat at a table near the window reading the *Wall Street Journal*. Two teener students sat leaning against the glass wall window looking down into Forty-second Street and its swirling crowds. A fat woman sat at a table in a corner, holding a magazine up before her face. She lowered it and looked at us over the top. The four old ladies stopped talking and the businessman folded his *Wall Street Journal* and put it aside as if Ahmed and I were messengers of bad news. They were all in a miserable, nervous mood like the one I was in—expecting the worst from a doomed world.

Ahmed threaded his way among the tables towards the corner table where the fat woman sat. She put her magazine aside on another table as we approached. Her face was round and pleasant, with smile creases all over it. She nodded and smiled at me and then did not smile at Ahmed at all, but instead stared straight back into his eyes as he sat down in front of her.

He leaned across the table. "All right, Bessie, you feel it, too. Have you located who it is?"

She spoke in a low, intense voice, as if afraid to speak loudly: "I felt it first thing I woke up this morning, Ahmed. I tried to trace it for the Rescue Squad, but she's feeling, not thinking. And it's echoing off too many other people because they keep thinking up reasons why they feel so—" She paused and I knew what she was trying to describe. Trying to describe it made it worse.

She spoke in a lower voice and her round face was worried. "The bad dream feeling is hanging on, Ahmed. I wonder if I'm—"

She didn't want to talk about it, and Ahmed had his mouth open for a question, so I was sorry for her and butted in.

"What do you mean about peo-

ple making echoes? How come all this crowd—" I waved my hand in a vague way, indicating the city and the people. The Rescue Squad was supposed to rescue lost people. The city was not lost.

Ahmed looked at me impatiently. "Adults don't like to use telepathy. They pretend they can't. But say a man falls down an elevator shaft and breaks a leg. No one finds him, and he can't reach a phone so he'll get desperate and pray and start using mind power. He'll try to send his thoughts as loud as he can. He doesn't know how loud he can send. But the dope doesn't broadcast his name and where he is, he just broadcasts: 'Help, I've got a broken leg!' People around the area pick up the thought, and his friends pick up the thought, and even people far away who are a lot like him, same age, same business, they all start thinking, 'Help, I've got a broken leg!' They come limping into the emergency clinics and get X rays of good legs. The doctors tell them to go home. But they are picking up the thought, 'Help! I'm going to die unless I get help!' so they hang around the clinics and bother the doctors. They are scared. The Rescue Squad uses them as tracers. Whenever there is an abnormal wave of people applying for help in one district, we try to find the center of the wave and locate someone in real trouble."

The more he talked the better I felt. It untuned me from the bad mood of the day, and Rescue Squad work was beginning to sound like something I could do. I know how people feel just by standing close to them. Maybe the Rescue Squad would let me join if I showed that I could detect people.

"Great," I said. "What about preventing murders? How do you do that?"

Ahmed took out his silver badge and looked at it. "I'll give you an example. Imagine an intelligent, sensitive kid with a vivid imagination. He is being bullied by a stupid father. He doesn't say anything back; he just imagines what he will do to the big man when he grows up. Whenever the big man gets him mad the kid clenches his fists and smiles and puts everything he's got into a blast of mental energy, thinking of himself splitting the big man's skull with an ax. He thinks loud. A lot of people in the district have nothing much to do, nothing much to think about. They never plan or imagine much and they act on the few thoughts that come to them. Get it?"

"The dopes act out what he is thinking," I grinned.

Ahmed looked at my grin with a disgusted expression and turned back to the fat woman. "Bessie, we've got to locate this victim. What do the tea leaves say about where she is?"

"I haven't asked." Bessie reached over to the other table and picked up an empty cup. It had a few sog-

gy tea leaves in the bottom. "I was hoping that you would find her." She heaved herself to her feet and waddled into the kitchen.

I was still standing. Ahmed looked at me with a disgusted expression. "Quit changing the subject. Do you want to help rescue someone or don't you?"

Bessie came back with a round pot of tea and a fresh cup on a tray. She put the tray on the table, and filled the cup, then poured half of the steaming tea back into the pot. I remembered that a way to get information from the group-mind is by seeing how people interpret peculiar shapes like ink blots and tea leaves, and I stood quietly, trying not to bother her.

She lowered herself slowly in to her chair, swirled the tea in the cup, and looked in. We waited. She rocked the cup, looking; then shut her eyes and put the cup down. She sat still, eyes closed, the eyelids squeezed tight in wrinkles.

"What was it?" Ahmed asked in a low voice.

"Nothing, nothing, just a—" She stopped and choked. "Just a damned, lousy maggotty skull."

That had to be a worse sign than getting the ace of spades in a card cut. Death. I began to get that sick feeling again. Death for Bessie?

"I'm sorry," Ahmed said. "But push on, Bessie. Try another angle. We need the name and address."

"She was not thinking about her name and address," Bessie's eyes were still tightly shut.

Suddenly Ahmed spoke in a strange voice. I'd heard that voice years ago when he was head of our gang—when he hypnotized another kid. It was a deep smooth voice and it penetrated inside of you.

"You need help and no one has come to help you. What are you thinking?"

The question got inside my head. An answer opened up and I started to answer, but Bessie answered first. "When I don't think, just shut my eyes and hold still, I don't feel anything, everything goes far away. When the bad things begin to happen I can stay far away and refuse to come back." Bessie's voice was dreamy.

The same dark sleepy ideas had formed in my own head. She was saying them for me. Suddenly I was afraid that the darkness would swallow me. It was like a night cloud, or a pillow, floating deep down and inviting you to come and put your head on it, but it moved a little and turned and showed a flash of shark teeth, so you knew it was a shark waiting to eat anyone who came close.

Bessie's eyes snapped open and she straightened herself upright her eyes so wide open that white showed around the rims. She was scared of sleeping. I was glad she had snapped out of it. She had been drifting down into the inviting dark toward that black monster.

"If you went in too deep, you could wake up dead," I said and put a hand on Ahmed's shoulder to warn him to slow down.

"I don't care which one of you speaks for her," he said, without turning around. "But you have to learn to separate your thoughts from hers. You're not thinking of dying—the victim is. She's in danger of death, somewhere." He leaned across the table to Bessie again, "Where is she?"

I tightened my grip on Ahmed's shoulder, but Bessie obediently picked up the teacup in fat fingers and looked in again. Her face was round and innocent, but I judged she was braver than I was.

I went around to Bessie's side of the table to look into the teacup over her shoulder. A few tea leaves were at the bottom of the cup, drifting in an obscure pattern. She tapped the side of the cup delicately with a fat finger. The pattern shifted. The leaves made some sort of a picture, but I could not make out exactly what it was. It looked like it meant something, but I could not see it clearly.

Bessie spoke sympathetically. "You're thirsty, aren't you? There, there, Honeybunch. We'll find you. We haven't forgotten you. Just think where you are and we will—" Her voice died down to a low, fading mumble, like a windup doll running down. She put the cup down and put her head down into her spread hands.

I heard a whisper. "Tired of trying, tired of smiling. Let die. Let death be born. Death will come out to destroy the world, the worthless dry, rotten—"

Ahmed reached across and grasped her shoulders and shook them. "Bessie, snap out of it. That's not you. It's the *other one.*"

Bessie lifted a changed face from her hands. The round smiling look was gone into sagging sorrowful folds like an old bloodhound. She mumbled, "It's true. Why wait for someone to help you and love you? We are born and die. No one can help that. No reason to hope. Hope hurts. Hope hurt *her.*" It bothered me to hear Bessie talk. It was like she were dead. It was a corpse talking.

Bessie seemed to try to pull herself together and focus on Ahmed to report, but one eye went off focus and she did not seem to see him.

She said, "Hope hurts. She hates hope. She tries to kill it. She felt my thinking and she thought my feelings of life and hope were hers. I was remembering how Harry always helped me, and she blasted in blackness and hate—" She put her face down in her hands again. "Ahmed, he's dead. She killed Harry's ghost in my heart. He won't ever come back anymore, even in dreams." Her face was dead, like a mask.

He reached over and shook her shoulder again. "Bessie, shame on you, snap out of it."

She straightened and glared. "It's true. All men are beasts. No one is going to help a woman. You want me to help you at your job and win you another medal for finding that girl, don't you? You don't care about her." Her face was darkening, changing to something worse, that reminded me of the black shapes of the clouds.

I had to pull her out of it, but I didn't know what to do.

Ahmed clattered the spoon against the teacup with a loud clash and spoke in a loud casual voice: "How's the restaurant business, Bessie? Are the new girls working out?"

She looked down at the teacup, surprised, and then looked vaguely around the restaurant. "Not many customers right now. It must be an off hour. The girls are in the kitchen." Her face began to pull back into its own shape, a pleasant restaurant-service mask, round and ready to smile. "Can I have the girls get you anything, Ahmed?"

She turned to me with a habit of kindness, and her words were less mechanical. "Would you like anything, young man? You look so energetic standing there! Most young people like our Turkish honey rolls." She still wasn't focused on me, didn't see me, really, but—I smiled back at her, glad to see her feeling better.

"No thank you, Ma'am," I said and glanced at Ahmed to see what he would want to do next.

"Bessie's honey rolls are famous," Ahmed said. "They are dripping with honey and have so much almond flavor they burn your mouth." He rose easily, looking lazy. "I guess I'll have a dozen to take along."

The fat woman sat blinking her eyes up at him. Her round face did not look sick and sagging anymore, just sort of rumpled and meaningless, like your own face looks in the mirror in the morning. "Turkish honey-and-almond rolls," she repeated. "One dozen." She rang a little bell in the middle of the table and rose.

"Wait for me downstairs," Ahmed told me. He turned back to Bessie.

"Remember the time a Shriners Convention came in and they all wanted lobster and palm reading at once? Where did you get all those hot lobsters?" They moved off together to the counter which displayed cookies and rolls. A pretty girl in a frilled apron trotted out of the kitchen and stood behind the counter.

Bessie laughed, starting with a nervous high-pitched giggle and ending up in a deep ho-ho sound like Santa Claus. "Do I remember? What a hassle! Imagine me on the phone trying to locate twenty palm readers in ten minutes! I certainly was grateful when you sent over those twenty young fellows and girls to read palms for my Shriners. I was really nervous until I saw they

had their marks really listening, panting for the next word. I thought you must have gotten a circus tribe of gypsies from the cooler. *Ho-ho.* I didn't know you had sent over the whole police class in Suspect Personality Analysis."

I went out the door, down to the sidewalk. A few minutes later Ahmed came down the escalator two steps at a time and arrived at the sidewalk like a rocket. "Here, carry these." He thrust the paper bag of Turkish honey rolls at me. The warm, sweet smell was good. I took the bag and plunged my hand in.

"Just carry them. Don't eat any." Ahmed led the way down the subway stairs to the first underground walkway.

I pulled my hand out of the bag and followed. I was feeling so shaky I went down the stairs slowly one at a time instead of two at a time. When I got there Ahmed was looking at the signs that pointed in different directions, announcing what set of tracks led to each part of the city. For the first time I saw that he was uncertain and worried. He didn't know which way to go. It was a strange thought for me, that Ahmed did not know which way to go. It meant he had been running, without knowing which way to run.

He was thinking aloud: "We know that the victim is female, adult, younger than Bessie, probably pregnant, and is trapped some place where there is no food or water for her. She expected help from the people she loves, and was disappointed, and now is angry with the thought of love and hates the thought of people giving help."

I remembered Bessie's suddenly sick and flabby face, after the victim had struck out at Bessie's thought of giving help. *Angry* seemed to be the understatement of the year. I remembered the wild threatening sky, and I watched the people hurrying by, pale and anxious. Two chicks passed in bad shape. One was holding her stomach and muttering about Alka-Seltzer, and the other had red-rimmed eyes as if she had just been weeping. Can one person in trouble do that to a whole city full of people?

"Who is she, Ahmed?" I asked. "I mean, *what* is she anyhow?"

"I don't understand it myself," Ahmed said. Suddenly he attacked me again with his question, using that deep hypnotic voice to push me backward into the black whirlpools of the fear of death. *"If you were thirsty, very thirsty, and there was only one place in the city you could go to buy a thirst quencher where—"*

"I'm not thirsty." I tried to swallow, and my tongue felt swollen, my mouth seemed dry and filled with sand, and my throat was coated with dry gravel. The world tilted over sideways. I braced my feet to stand up. "I *am* thirsty. How did you do that? I want to go to the

White Horse Tavern on Bleecker Street and drink a gallon of ginger ale and a bottle of brown beer."

"You're my compass. Let's go there. I'll buy for you."

Ahmed ran down the Eighth Avenue subway stairs to the chair tracks. I followed, clutching the bag of sweet smelling rolls as if it were a heavy suitcase full of rocks. The smell made me hungry and weak. I could still walk, but I was pretty sure that, if Ahmed pushed me deep into that black mood just once more, they'd have to send me back on a stretcher.

On the tracks we linked our chairs and Ahmed shifted the linked chairs from belt to belt until we were traveling at a good speed. The chairs moved along the tunnels, passing under bright store windows with beautiful mannequins dancing and displaying things to buy. I usually looked up when we got near the forest fire and waterfall three-dimensional pics, but today I did not look up. I sat with my elbows braced on my knees and my head hanging. Ahmed looked at me alertly, his black eyebrows furrowed and dark eyes scanning me up and down like I was a medical diagram.

"Man, I'd like to see the suicide statistics right now. One look at you and I know it's bad."

I had enough life left to be annoyed. "I have my own feelings, not just some chick's feelings. I've been sick all day. A virus or something."

"Damnit, will you never understand? We've got to rescue this girl because she's broadcasting. She's broadcasting feeling sick!"

I looked at the floor between my feet. "That's a lousy reason. Why can't you rescue her just because she's in trouble? Let her broadcast. High School Psych-A said that everybody broadcasts."

"Listen," Ahmed leaned forward ready to tell me an idea. His eyes began to glitter as the idea took him. "Maybe she broadcasts too loud. Statistics has been running data on trends and surges in popular action. They think that people who broadcast too loud might be causing some of the mass action."

"I don't get you, Ahmed."

"I mean like they get a big surge of people going to Coney Island on a cloudy day, and they don't have subway cars ready for it, and traffic ties up. They compare that day with other cloudy days, the same temperature and the same time of year other years, and try to figure out what caused it. Sometimes it's a factory vacation; but sometimes it's one man, given the day off who goes to the beach, and an extra crowd of a thousand or so people from all over the city, people that don't know him, suddenly make excuses, clear schedules and go to the beach, sometimes arriving at almost the same time, jamming up the subways for an hour, and making it hard for the Traffic Flow Control people."

"Is it a club?" I was trying to make out what he meant, but I couldn't see what it had to do with anything.

"No," he said. "They didn't know each other. It's been checked. The Traffic Flow experts have to know what to expect. They started collecting names from the crowds. They found that most of the people in each surge are workers with an IQ below one hundred, but somehow doing all right with their lives. They seemed to be controlled by one man in the middle of the rush who had a reason to be going in that direction. The Statistics people call the man in the middle the *Archetype*. That's an old Greek word. The original that other people are copied from—one real man and a thousand echoes."

The idea of some people being echoes made me uneasy. It seemed insulting to call anyone an echo. "They must be wrong," I said.

"Listen," Ahmed leaned forward, his eyes brightening. "They think they are right—one man and a thousand echoes. They checked into the lives of the ones that seemed to be in the middle. The Archetypes are energetic ordinary people living average lives. When things go as usual for the Archetype, he acts normal and everybody controlled by him acts normal, get it?"

I didn't get it, and I didn't like it. "An average healthy person is a good joe. He wouldn't want to control anyone," I said, but I knew I was sugaring the picture. Humans can be bad. People love power over people. "Listen," I said, "some people like taking advice. Maybe it's like advice?"

Ahmed leaned back and pulled his chin. "It fits. Advice by ESP is what you mean. Maybe the Archetype doesn't know he is broadcasting. He does just what the average man wants to do. Solves the same problems—and does it better. He broadcasts loud, pleasant, simple thoughts and they are easy to listen to if you have the same kind of life and problems. Maybe more than half the population below an IQ of 100 have learned to use telepathic pickup and let the Archetypes do their thinking for them."

Ahmed grew more excited, his eyes fixed on the picture he saw in his head. "Maybe the people who are letting Archetypes run their lives don't even know they are following anyone else's ideas. They just find these healthy, problem-solving thoughts going on in a corner of their mind. Notice how the average person believes that thinking means sitting quietly and looking far away, resting your chin in your hand like someone listening to distant music? Sometimes they say, 'When there's too much noise I *can't hear myself think*.' But when an intellectual, a real thinker is thinking—" He had been talking louder with more excitement as the subject got hold of him. He was

leaning forward, his eyes glittering.

I laughed, interrupting. "When an intellectual is thinking he goes into high gear, leans forward, bugs his eyes at you and practically climbs the wall with each word, like you, Ahmed. Are you an Archetype?"

He shook his head. "Only for my kind of person. If an average kind of person started picking up my kind of thinking, it wouldn't solve his problems—so he would ignore it."

He quit talking because I was laughing so hard. Laughing drove away the ghosts of despair that were eating at my heart. "Your kind of person! Ho ho. Show me one. Ha ha. Ignore it? Hell, if a man found your thoughts in his head he'd go to a psychiatrist. He'd think he was going off his rails."

Ahead we saw the big "14" signs signaling Fourteenth Street. I shifted gears on the linked seats and we began to slide sideways from moving cables to slower cables, slowing and going uphill.

We stopped. On the slow strip coming along a girl was kneeling sideways in one of the seats. I thought she was tying a shoelace, but when I looked back I saw she was lying curled up, her knees under her chin, her thumb in her mouth. Regression. Retreat into infancy. Defeat.

Somehow it sent a shiver of fear through me. Defeat should not come so easily. Ahmed had leaped out of his chair and was halfway toward the stairs.

"Ahmed!" I shouted.

He looked back and saw the girl. The seat carried her slowly by in the low-speed lane.

He waved for me to follow him and bounded up the moving stairs. "Come on," he yelled back, "before it gets worse."

When I got up top I saw Ahmed disappearing into the White Horse Tavern. I ran down the block and went in after him, into the cool shadows and paneled wood—nothing seemed to move. My eyes adjusted slowly and I saw Ahmed with his elbows on the counter, sipping a beer, and discussing the weather with the bartender.

It was too much for me. The world was out of its mind in one way and Ahmed was out of his mind in a different way. I could not figure it out, and I was ready to knock Ahmed's block off.

I was thirsty, but there was no use trying to drink or eat anything around that nut. I put my elbows on the bar a long way from Ahmed and called over to the bartender. "A quart of bock to go." I tilted my head at Ahmed, "He'll pay for it."

I sounded normal enough, but the bartender jumped and moved fast. He plunked a bottle in a brown paper bag in front of me and rubbed the bar in front of me with wood polish.

"Nice weather," he said, and looked around his place with his shoulders hunched, looking over his shoulders. "I wish I was outside walking in the fresh air. Have you been here before?"

"Once," I said, picking up the bag. "I liked it." I remembered the people who had shown me the place. Jean Fitzpatrick—she had shown me some of her poetry at a party—and a nice guy, her husband. Mort Fitzpatrick had played a slide whistle in his own tunes when we were walking along over to the tavern, and some bearded friends of theirs walked with us and talked odd philosophy and strange shared trips. The girl told me that she and her husband had a house in the neighborhood, and invited me to a party there, which I turned down, and she asked me to drop in anytime.

I knew she meant the "anytime" invitation. They were villagers, Bohemians, the kind who collect art, and strange books, and farout people. Villagers always have the door open for people with strange stories and they always have a pot of coffee ready to share with you.

"Do Jean Fitzpatrick and Mort Fitzpatrick still live around here?" I asked the bartender.

"I see them around. They haven't been in recently." He began to wipe and polish the bar away from me, moving toward Ahmed. "For all I know they might of moved."

Ahmed sipped his beer and glanced at us sidelong, like a stranger.

I walked out into the gray day with a paper bag under my arm with its hard weight of Bock beer inside. I could quit this crazy, sick-making business of being a detector. I could go look up somebody in the Village like Jean Fitzpatrick and tell how sick the day had been, and how I couldn't take it and had chickened out, until the story began to seem funny and the world became some place I could stand.

Ahmed caught up with me and put a hand on my arm. I stopped myself from spinning around to hit him and just stood—staring straight ahead.

"You angry?" he asked, walking around me to get a look at my face. "How do you feel?"

"Ahmed, my feelings are my own business. O.K.? There is a girl around here I want to look up. I want to make sure she is all right. O.K.? Don't let me hold you up on Rescue Squad business. Don't wait for me. O.K.?" I started walking again, but the pest was walking right behind me. I had spelled it out, clear and loud that I didn't want company. I did not want to flatten him, because at other times he had been my friend.

"May I come along?" he asked politely. "Maybe I can help."

I shrugged, walking along toward the river. What difference did it make? I was tired and there was too much going on in New York

City. Ahmed would go away soon on his business. The picture of talking to the girl was warm, dark, relaxing. We'd share coffee and tell each other crazy little jokes and let the world go forgotten.

The house of the Fitzpatricks was one of those little tilted houses left over from a hundred years ago when the city was a town, lovingly restored by hand labor and brightened under many coats of paint by groups of volunteer decorators. It shone with white paint and red doors and red shutters with windowboxes under each window growing green vines and weeds and wild flowers. The entire house was overhung by the gigantic girders of the Hudson River Drive with its hissing flow of traffic making a faint rumble through the air and shaking the ground underfoot.

I knocked on the bright red door. No one answered. I found an unused doorbutton at the side and pushed it. Chimes sounded, but nothing stirred inside.

Village places usually are lived in by guests. Day or night someone is there: broke artists, travelers, hitchhikers, stunned inefficient looking refugees from the student or research worlds staving off a nervous breakdown by a vacation far away from pressure. It was considered legitimate to put your head inside and holler for attention if you couldn't raise anyone by knocking and ringing. I turned the knob to go in. It would not turn. It was locked.

I felt like they had locked the door when they saw me coming. The big dope, musclehead George is coming, lock the door. This was a bad day, but I couldn't go any farther. There was no place to go but here.

I stood shaking the knob dumbly, trying to turn it. It began to make a rattling noise like chains, and like an alarm clock in a hospital. The sound went through my blood and almost froze my hand. I thought something was behind the door, and I thought it was opening and a monster with a skull face was standing there waiting.

I turned my back to the door and carefully, silently went down the two steps to the sidewalk. I had gone so far off my rails that I thought I heard the door creaking open, and I thought I felt the cold wind of someone reaching out to grab me.

I did not look back, just strode away, walking along the same direction I had been going, pretending I had not meant to touch that door.

Ahmed trotted beside me, sidling to get a view of my face, scuttling sideways and ahead of me like a big crab.

"What's the matter? What is it?"

"She's not— Nobody was—" It was a lie. Somebody or something was in that house. Ignore it, walk away faster.

"Where are we going now?" Ahmed asked.

"Straight into the river," I said and laughed. It sounded strange and hurt my chest like coughing. "The water is a mirage in the desert and you walk out on the dry sand looking for water to drown in. The sand is covered with all the lost dried things that sank out of sight. You die on the dry sand, crawling, looking for water. Nobody sees you. People sail overhead and see the reflection of the sky in the fake waves. Divers come and find your dried mummy on the bottom and make notes, wondering because they think there is water in the river. But it is all a lie."

I stopped. The giant docks were ahead, and between them the ancient, small wharfs. There was no use going in that direction, or in any direction. The world was shriveled and old, with thousands of years of dust settling on it—a mummy case. As I stood there the world grew smaller, closing in on me like a lid shutting me into a box. I was dead, lying down, yet standing upright on the sidewalk. I could not move.

"Ahmed," I said, hearing my voice from a great distance, "get me out of this. What's a friend for?"

He danced around me like some evil goblin. "Why can't you help yourself?"

"I can't move," I answered, being remarkably reasonable.

He circled me, looking at my face and the way I stood. He was moving with stops and starts, like a bug looking for a place to bite. I imagined myself shooting a spray can of insecticide at him.

Suddenly he used the *voice,* the clear deep hypnotic voice that penetrates into the dark private world where I live when I'm asleep and dreaming.

"Why can't you move?"

The gulf opened up beneath my feet. "Because I'd fall," I answered.

He used the voice again, and it penetrated to an interior world where the dreams lived and were real all the time. I was shriveled and weak, lying on dust and bits of old cloth. A foul and dusty smell was in my nostrils and I was looking down over an edge where the air came up from below. The air from below smelled better. I had been there a long time. Ahmed's voice reached me, it asked—

"How far would you fall?"

I measured the distance with my eye. I was tired and the effort to think was very hard. Drop ten or twelve feet to the landing, then tangle your feet in the ladder lying there and pitch down the next flight of steep stairs. . . . Death waited at the bottom.

"A long way," I answered. "I'm too heavy. Stairs are steep."

"Your mouth is dry," he said.

I could feel the thirst like flames, drying up my throat, thickening my tongue as he asked the question, the jackpot question.

"Tell me, what is your name?"

I tried to answer with my right name, George Sanford. I heard a voice croak. "Jean Dalais."

"Where do you live?" he asked in the penetrating voice that rang inside my skull and rang into the evil other world where I, or someone was on the floor smelling dust for the duration of eternity.

"Downstairs," I heard myself answer.

"Where are you now?" he asked in the same penetrating voice.

"In hell," the voice answered from my head.

I struck out with careful aim to flatten him with the single blow. He was dangerous. I had to stop him, and leave him stopped. I struck carefully, with hatred. He fell backward and I started to run. I ran freely, one block, two blocks. My legs were my own, my body was my own, my mind was my own. I was George Sanford and I could move without fear of falling. No one was behind me. No one was in front of me. The sun shone through clouds, the fresh wind blew along the empty sidewalks. I was alone. I had left that capsule world of dead horror standing behind me like an abandoned phone booth.

This time I knew what to do to stay out of it. Don't think back. Don't remember what Ahmed was trying to do. Don't bother about rescuing anyone. Take a walk along the edge of the piers in the foggy sunshine and think cheerful thoughts, or no thoughts at all.

I looked back and Ahmed was sitting on the sidewalk far back. I remembered that I was exceptionally strong and the coach had warned me to hold myself back when I hit. Even Ahmed? But he had been thinking, listening, off guard.

What had I said? *Jean Dalais.* Jean Fitzpatrick had showed me some of her poetry, and that had been the name signed to it. Was Jean Dalais really Jean Fitzpatrick? It was probably her name before she married Mort Fitzpatrick.

I had run by the white house with the red shutters. I looked back. It was only a half a block back. I went back, striding before fear could grip me again and rattled the knob and pulled at the red door and looked at the lock.

Ahmed caught up with me.

"You know how to pick locks?" I asked him.

"It's too slow," he answered in a low voice. "Let's try the windows."

He was right. The first window we tried was only stuck by New York soot. With our hands black and grimy with soot we climbed into the kitchen. The kitchen was neat except for a dried-up salad in a bowl. The sink was dry, the air was stuffy.

It was good manners to yell announcement of our trespassing.

"Jean!" I called. I got back echoes and silence, and something small falling off a shelf upstairs.

The ghosts rose in my mind again and stood behind me, their claws outstretched. I looked over my shoulder and saw only the empty kitchen. My skin prickled. I was afraid of making a noise. Afraid death would hear me. Had to yell; afraid to yell. Had to move; afraid to move. Dying from cowardice. Someone else's thoughts, with the odor of illness, the burning of thirst, the energy of anger. I was shriveling up inside.

I braced a hand on the kitchen table. "Upstairs in the attic," I said. I knew what was wrong with me now. Jean Dalais was an Archetype. She was delirious and dreaming that she was I. Or I was really Jean Dalais suffering through another dream of rescue, and I was dreaming that strange people were downstairs in my kitchen looking for me. I, Jean, hated these hallucinations. I struck at the dream images of men with the true feeling of weakness and illness, with the memory of the time that had passed with no one helping me and the hatred of a world that trapped you and made hope a lie, trying to blast the lies into vanishing.

The George Sanford hallucination slid down to a sitting position on the floor of the kitchen. The bottle of bock in its paper bag hit the floor beside him with a heavy clunk, sounding almost real. "You go look, Ahmed," said the George Sanford mouth.

The other figure in the dream bent over and placed a phone on the floor. It hit the linoleum with another clunk and a musical chiming sound that seemed to be heard upstairs. "Hallucinations getting more real. Can hear 'em now," muttered the Sanford self—or was it Jean Dalais who was thinking?

"When I yell, dial O and ask for the Rescue Squad to come over." Ahmed picked up the paper bag of bock. "O.K., George?" He started looking through the kitchen drawers. "Great stuff, beer, nothing better for extreme dehydration. Has salt in it. Keeps the system from liquid shock."

He found the beer opener and slipped it into his hip pocket. "Liquid shock is from sudden changes in the water-versus-salt balance," he remarked, going up the stairs softly, two at a time. He went out of sight and I heard his footsteps, very soft and inquiring. Even Ahmed was afraid of stirring up ghosts.

What had Bessie said about the victim? "Hope hurts." She had tried to give the victim hope and the victim had struck her to the heart with a dagger of hatred and shared despair.

That was why I was sitting on the floor!

Danger George *don't think!* I shut my eyes and blanked my mind.

The dream of rescue and the man images were gone. I was Jean Dalais sinking down into the dark, a warm velvet darkness, no sensa-

tion, no thought, only distantly the pressure of the attic floor against my face.

A strange thump shook the floor and a scraping sound pulled at my curiosity. I began to wake again. It was a familiar sound, familiar from the other world and the other life, six days ago, an eternity ago, almost forgotten. The attic floor pushed against my face with a smell of dust. The thump and the scraping sound came again, metal against wood. I was curious. I opened dry, sand-filled eyes and raised my head, and the motion awakened my body to the hell of thirst and the ache of weakness.

I saw the two ends of the aluminum ladder sticking up through the attic trapdoor. The ladder was back now. It had fallen long ago, and now it was back, looking at me, expecting me to climb down it. I cursed the ladder with a mental bolt of hatred. What good is a ladder if you can't move? Long ago I had found that moving around brought on labor pains. Not good to have a baby here. Better to hold still.

I heard a voice. "She's here. George. Call the rescue squad." I hated the voice. Another imaginary voice in the long nightmare of imaginary rescues. Who was "George?" I was Jean Dalais.

George. Someone had called "George." Downstairs in the small imagined kitchen I imagined a small image of a man grope for a phone beside him on the floor. He dialed "O" clumsily. A female voice asked a question. The man image said "Rescue Squad," hesitantly.

The phone clicked and buzzed and then a deep voice said, "Rescue Squad."

In the attic I knew how a dream of the Rescue Squad should go. I had dreamed it before. I spoke through the small man-image. "My name is Jean Fitzpatrick. I am at 29 Washington Street. I am trapped in my attic without water. If you people weren't fools, you would have found me long ago. Hurry. I'm pregnant." She made the man-image drop the receiver. The dream of downstairs faded again as the man-image put his face in his hands.

My dry eyes were closed, the attic floor again pressed against my face. Near me was the creak of ladder rungs taking weight, and then the creaks of the attic floor something heavy moving on it gently, then the rustle of clothing as somebody moved; the click of a bottle opener against a cap; the clink of the cap hitting the floor; the bubbling and hissing of a fizzing cool liquid. A hand lifted my head carefully and a cold bottle lip pushed against my mouth. I opened my mouth and the cool touch of liquid pressed within it and down the dry throat. I began to swallow.

George Sanford, me, took his hands away from his eyes and looked down at the phone. I was not lying down; I was not drinking;

I was not thirsty. Had I dialed the Rescue Squad when Ahmed called me? A small mannequin of a man in Jean Fitzpatrick's mind had called and hung up, but the mannequin was me, George Sanford—six feet one and a half inches. I am no woman's puppet. The strength of telepathy is powered by emotion and need, and the woman upstairs had enough emotion and need, but no one could have done that to me if I did not want to help. No one.

A musical, two-toned note of a siren approaching, growing louder. It stopped before the door. Loud knocks came at the door. I was feeling all right but still dizzy and not ready to move.

"Come in," I croaked. They rattled the knob. I got up and let them in, then stood hanging on to the back of a chair.

Emergency squad orderlies in blue and white. "You sick?"

"Not me, a woman upstairs." I pointed and they rushed up the stairs, carrying their stretcher and medical kits.

There was no thirst or need driving her mind to intensity any more, but our minds were still connected somehow, for I felt the prick of a needle in one thigh, and then the last dizziness and fear dimmed and vanished, the world steadied out in a good upright position, the kitchen was not a dusty attic but only a clean empty kitchen and all the sunshine of the world was coming in the windows.

I took a deep breath and stretched, feeling the muscles strong and steady in my arms and legs. I went up to the second floor and steadied the ladder for the Rescue Squad men while they carried the unconscious body of a young woman down from the attic.

She was curly-haired with a dirt-and-tear streaked face and skinny arms and legs. She was bulging in the middle, as pregnant as a pumpkin.

I watched the blue and white Rescue truck drive away.

"Want to come along and watch me make out my report?" Ahmed asked.

On the way out of the kitchen I looked around for the Turkish honey rolls, but the bag was gone. I must have dropped it somewhere.

We walked south a few blocks to the nearest police station, Ahmed settled down at a desk they weren't using to fill out his report, and I found a stack of comic magazines in the waiting room and chose the one with the best action on the cover. My hands shook a little because I was hungry, but I felt happy and important.

Ahmed filled out the top, wrote a few lines, and then started working the calculator on the desk. He stopped, stared off into space, glanced at me and started writing again, glancing at me every second. I wondered what he was writing about me. I wanted the Rescue

Squad brass to read good things about me so they would hire me for a job.

"I hunch good, don't I, Ahmed?"

"Yes." He filled something into a space, read the directions for the next question and began biting the end of his pen and staring at the ceiling.

"Would I make a good detector?" I asked.

"What kind of mark did you get in Analysis of Variance in high school?"

"I never took it. I flunked probability in algebra, in six B—"

"The Rescue Squad wants you to fill out reports that they can run into the statistics machines. Look" —I went over and he showed me a space where he had filled out some numbers and a funny symbol like a fallen down *d*—"can you read it, George?"

"What's it say?"

"It says probability .005. That means the odds were two hundred to one against you finding the White Horse Tavern just by accident, when it was the place the Fitzpatrick woman usually went to. I got the number by taking a rough count of the number of bars in the phone book. More than two hundred wrong bars, and there was only one bar you actually went to. Two hundred divided by one, or two hundred. If you had tried two bars before finding the right one your chance of being wrong would have been two hundred divided by two. That's one hundred. Your score for being right was your chance of being wrong, or the reciprocal of your chance of being right by luck. Your score is two hundred. Understand? Around here they think forty is a good score."

I stared at him, looking stupid. The school had tried relays of teachers and tutors on me for two terms before they gave up trying to teach me. It didn't seem to mean anything. It didn't seem to have anything to do with people. Without probability algebra and graphs I found out they weren't going to let me take Psychology B, History, Social Dynamics, Systems Analysis, Business Management, Programming or Social Work. They wouldn't even let me study to be a Traffic Flow cop. I could have taken Electronics Repair but I wanted to work with people, not TV sets, so I dropped out. I couldn't do school work, but the kind of thing the Rescue Squad wanted done, I could do.

"Ahmed, I'd be good in the Rescue Squad. I don't need statistics. Remember I told you you were pushing Bessie in too deep. I was right, wasn't I? And you were wrong. That shows I don't need training."

Ahmed looked sorry for me. "George, you don't get any score for that. Every soft-hearted slob is afraid when he sees someone going into a traumatic area in the subjective world. He always tries to make them stop. You would have said I

was pushing her too deep anyhow, even if you were wrong."

"But I was right."

Ahmed half rose out of his chair, then made himself calm down.

He settled back, his lips pale and tight against his teeth. "It doesn't matter if you were right, unless you are right against odds. You get credit for picking the White Horse Tavern out of all the taverns you could have picked, and you get credit for picking the girl's house out of all the addresses you could have picked. I'm going to multiply the two figures by each other. It will run your score over eighty thousand probably. That's plenty of credit."

"But I only went to the tavern because I was thirsty. You can't credit me with that. You made me thirsty somehow. And I went to the girl's house because I wanted to see her. Maybe she was pulling at me."

"I don't care what your reasons were! You went to the right place, didn't you? You found her, didn't you?" Ahmed stood up and shouted. "You're talking like a square. What do you think this is 1950, or some time your grandmother was running a store? I don't care what your reasons are, nobody cares anymore what the reasons are. We only care about results, understand? We don't know why things happen, but if everyone makes out good reports about them, with clear statistics, we can run the reports into the machines, and the machines will tell us exactly what is happening, and we can work with that, because they're facts, and it's the real world. I know you can find people. Your reasons don't matter. Scientific theories about the causes don't matter!"

He was red in the face and shouting, like I'd said something against his religion or something. "I wish we could get theories for some of it. But, if the statistics say that if something funny happens here and something else funny always happens over there, next, we don't have to know how the two connect; all we have to do is expect the second thing every time we see the first thing happen. See?"

I didn't know what he was talking about. My tutors had said things like that to me, but Ahmed felt miserable enough about it to shout. Ahmed was a friend.

"Ahmed," I said, "would I make a good detector?"

"You'd make a great detector, you dope!" He looked down at his report. "But you can't get into the Rescue Squad. The rules say that you've got to have brains in your head instead of rocks. I'll help you figure out some place else you can get a job. Stick around. I'll loan you fifty bucks as soon as I finish this report. Go read something."

I felt lousy, but I stood there fighting it, because this was my last chance at a real job, and there was something right about what I was trying to do. The Rescue Squad

needed me. Lost people were going to need me.

"Ahmed," I said, trying to make my meaning very clear to him. "I *should* be in your department. You gotta figure out a way to get me in."

It's hard watching a strong confident guy go through a change. Generally Ahmed always knows what he is doing, he never wonders. He stared down at his report, holding his breath, he was thinking so hard. Then he got away from the desk and began to pace up and down. "What the hell is wrong with me? I must be going chicken. Desk work is softening me up." He grabbed up his report off the desk. "Come on, let's go buck the rules. Let's fight City Hall."

"We can't hire your friend." The head of the Rescue Squad shook his head. "He couldn't pass the tests. You said so yourself."

"The *rules* say that George has to pass the pen and paper tests." Ahmed leaned forward on the desk and tapped his hand down on the desk top, emphasizing words. "The rules are *trash* rules made up by trash bureaucrats so that nobody can get a job but people with picky little old-maid minds like them! Rules are something we use to deal with people we don't know and don't care about. We know George and we know we want him! How do we fake the tests?"

The chief held out one hand, palm down. "Slow down, Ahmed. I

appreciate enthusiasm, but maybe we can get George in legitimately. I know he cut short an epidemic of hysteria and psychosomatics at the hospitals and saved the hospitals a lot of time and expense. I want him in the department if he can keep that up. But let's not go breaking up the system to get him in. We can use the system."

The chief opened the intercom switch and spoke into the humming box. "Get me Accounting, will you?" The box answered after a short while and the chief spoke again. He was a big, square built man, going slightly flabby. His skin was loose and slightly gray. "Jack, listen, we need the services of a certain expert. We can't hire him. He doesn't fit the height and weight regulations, or something like that. How do we pay him?"

The man at the other end spoke briefly in accounting technicalities: ". . . Contingencies, services, fees. Consultant. File separate requisitions. File accounting slips each month for total specifying separate services rendered, time and results, with statistics of probability rundown on departmental expenses saved by outside help and city expenses saved by the Rescue Squad action, et cetera, et cetera. Get it?"

"O.K., thanks." He shut off the chatterbox and spoke to Ahmed. "We're in. Your friend is hired."

My feet were tired standing there. My hands were shaking slightly so I had stuffed them into my pockets, like a nonchalant pose. I was passing the time thinking of restaurants, all the good ones that served the biggest plates for the least money. "When do I get paid?" I asked.

"Next month," Ahmed said. "You get paid at the end of every month for the work you did on each separate case. Don't look so disappointed. You are a consultant expert now. You are on my expense account. I'm supposed to buy your meals and pay your transportation to the scene of the crime whenever I consult you."

"Consult me now," I said.

We had a great Italian meal at an old-fashioned Italian restaurant: lasagna, antipasto, French bread in thick, tough slices, lots of butter, four cups of hot black coffee and spumoni for dessert, rich and sweet. Everything tasted fresh and cooked just right, and they served big helpings. I stopped shaking after the second cup of coffee.

There was something funny about that restaurant. Somebody was planning a murder, but I wasn't going to mention it to Ahmed until after dessert.

He'd probably want me to rescue somebody instead of eating. ■

Project Island Bounce

Sometimes the best way to achieve a necessary result is to do a little astute cheating!

LAWRENCE A. PERKINS

Illustrated by Kelly Freas

Chancellor Norbert Parker-Horst quickly thumbed through the report and angrily slammed it down on his desk. "How long has this been going on?" he demanded. "This could ruin Eurica. Damnation, it could wreck the planet!"

Phillip Nowotny, First Secretary of the Exchequer, fidgeted nervously. "It's hard to say, Excellency. At least six months. And the first Ysterii spaceships, carrying the full complement for their diplomatic mission, touched down nearly two years ago."

"The Ysterii have been here for one year, seven months, and eighteen days," snapped the chancellor. "I personally screened the contact team that went to Procyon IV to meet the Ysterii on a neutral planet after our exploration teams ran across each other there."

Nowotny nervously clasped his hands. "Excellency, I meant to say that for at least a year after the Ysterii came, contact was entirely beneficial to Eurica. In a way it still is. Half a dozen of our biggest industries owe their prosperity to trade with Ysterbaq."

The chancellor gestured at the report. "And half a dozen industries are slavishly dependent on that trade."

"Well . . . dependent. But Ysterbaq must be just as dependent on their imports from us."

The chancellor stared vacantly into middle distance, then gingerly picked up the report again. "Ysterii freighters touch down with cargoes worth substantially more than the goods of ours which they take back with them. We pay them the difference in standard Tellurian credits—a monetary unit invented entirely for their benefit, since they demanded to deal with the whole planet. And they spend those credits in Asianesia—all of them."

Nowotny wrung his hands. "Not *all* of them, Excellency. A few Ysterii stay in Eurica. And pneumotube and jetrocket transports from Nyork to Honolulu have been thriving. Gross is up at least three hundred percent, and gaining daily." He smiled hopefully.

Parker-Horst scowled. "Nowotny, I believe that you'd take undertaker's rouge on a corpse's face as a sign of health. Have you anything good to add to this dismal report? No? Very well. Assume that the imbalance won't get any worse. Figure out how long it will be before Asianesia surpasses Eurica in net worth. Report as soon as you know."

The chancellor barely noticed the frightened first secretary as he scuttled away. He was pondering the Earth-Ysterbaq treaty again. For the first time, he regretted that he had caused the treaty to be planetary rather than regional. But a regional treaty would have been impossible for the Ysterii; the concept of multiple states on the same planet had been almost impossible for them to accept.

Frowning, he glanced at the first secretary's report. Could this thing be a deliberate plot against Eurica? Was it a masterful alien stroke to counter Eurica's planned confrontation on a neutral planet to minimize cultural shock as humans met Ysterii? He filled his pipe and pondered, forgetting to light it.

In a way, Parker-Horst mused, it was an invasion. At least once a week an alien carrier orbited and the Nyork shuttles ferried in hundreds of Ysterii—and it was remarkable how much a Ysterii tourist resembled a human tourist even if the Ysterii physique did consist of a virtually shapeless blob surrounded by three locomotive extrusions and six manipulative tentacles.

It was an invasion—but were those alien carriers not filled half to capacity by humans for the return trip? And of those carriers, was not every eighth or ninth a Eurican vessel—and were not three space yards working ceaselessly to build more? Contact between the planets had been unavoidable, but had his administration not made it a meeting of equals?

The communicator on his desk chimed. He keyed it, and Nowotny's chubby face appeared on the screen, eyes wide in alarm. "Excellency," he blurted, "as soon as I returned to my office, I posed your question to our main computer. That was easy, as it still retains all of the original data."

Suddenly realizing that his pipe was unlit, Parker-Horst barked, "Well?"

"Excellency, the computer predicts that Asianesia will overtake Eurica in four months, two weeks, and three days. It gives its margin of error as minus six to plus four days, and a narrow margin means extreme probability." Nowotny's stricken expression pleaded for help and reassurance.

"Thank you," replied Parker-Horst neutrally as he broke the connection. At the moment he had no reassurance for anybody. Belatedly he lit his pipe and puffed vigorously, trying to ignore the symbolism of a smoke cloud. Earth had been through a smoke cloud once, and the present three planetary governments had been humanity's answer as it dug out of the ashes.

Dominance by Eurica, containing as it did most of the survivors of Blowup, had been accepted almost casually by the whole planet—especially because most of old Asia, which had refused armistice, was now largely a radioactive waste. The consolidation of Gonwonda out of nations that had not been directly involved in Blowup, was almost automatic. After all, they were all breathing the same radioactive atmosphere.

Only Asianesia, consisting of half-assimilated former nations that still struggled for identity, many of them blasted by radioactive deserts, was not completely in-

tegrated into the planetary system. And a suddenly strong Asianesia could cause any number of complications as the old national groups struggled; there might even be another Blowup.

Parker-Horst puffed dense blue clouds and tried to imagine a peaceful world in which Asianesia was the dominant power. Asianesia! Closing his eyes, he recalled the improbable green tints of the water in Honolulu harbor, the orchids casually growing in the yards of overcrowded hovels, the luscious rainbows in the cloud-flecked sky. Odd that the Sanwichisles, once a part of the Unitistates, had reverted to the Hawaiian language and joined Asianesia.

Parker-Horst puffed reflectively. He had made several state visits to Honolulu, capital of Asianesia. More often he had been there as a private vacationer sporting in the roaring surf of Waikiki, reveling in a luau, or simply basking in the eternal springtime.

Absently he reached into the far corner of a drawer for a chunk of volcanic scoria gleaming with "tears of Pele," the gemstone of the Sanwichisles and a souvenir of a February outing on Oahu a dozen years ago. Possibly Honolulu had done well to become the Asianesian capital rather than a Eurican outpost two thousand watery miles from a continental base. But then, what of Anzakia, twice as far, which was Eurican?

Parker-Horst turned the porous gray rock idly in his hand, making the tiny gems sparkle. Vividly he remembered finding it. That had been a pleasant season, and he still found time to correspond with his erstwhile host and companion . . .

The thought galvanized him. He had visited, he had formed a friendship, in spite of ill will between Eurica and Asianesia. The Ysterii were totally nonhuman, but their tourists looked marvelously like human tourists—sunglasses, gaudy clothes, cameras, guide books. And a few of them had remained in Amrica; Amrica had glaciers, mountains, culture treasures, factories, and the north magnetic pole.

Tossing the gray rock back into the drawer, Parker-Horst reached for his communicator. A few Ysterii were exploring the Amrican continent, and some were in Eurp. Some of them must have made human acquaintances, however casually. The humans would have picked up a few facts, however casually . . .

Excitedly he keyed his communicator, and the face of the First Secretary of Security appeared on the screen. "Excellency!" gasped the secretary.

Parker-Horst ignored formalities. "We've got two, three dozen Ysterii in Amrica and probably twice as many in Eurp. Some of them must have human acquaintances; some of them may even have human friends. How long

would it take you to find those humans?"

Secretary Schimmel-Jones blinked in astonishment. "About one day, Excellency. Sooner if it's an emergency and we drop everything else."

"Drop everything else. And then interrogate each human. Find out whether the Ysterii have an organized plan to wreck human civilization by upsetting our balance of governments. And don't reveal what you're looking for; invent a story about three Ysterii and their human guide who have disappeared in the finger lake region of the Electorate of Nyork. Clear?"

"Certainly, Excellency," stammered Schimmel-Jones, although his stunned expression belied his words.

"If there's anything there, Schimmel-Jones will find it," muttered the chancellor as he broke the connection. Trying to believe in his own optimism, he keyed the Archives and was not surprised when the communicator screen remained blank. Patterson, Chief Librarian, was probably in some cubbyhole with members of his staff gloating over some new acquisition, or in a conference room discussing some musty new program.

Patiently the chancellor keyed the emergency call button and waited, idly wondering how a new program could be musty. Five minutes, ten, twelve, and the screen flickered to display the thin face of Chief Librarian Patterson blinking at him through thick spectacles. "May I ask to know who interrupted this . . . ulp! Excellency!"

"You are supposed to be on immediate call at all times," reproved Parker-Horst with uncharacteristic mildness. "I have been waiting for twelve minutes, seventeen seconds. And time happens to be crucial just now."

Recognizing sarcasm, Patterson flushed miserably. "I'm very sorry, Excellency. We've just gotten in a shipment of pre-Blast publications from the Electorate of Kennesawia. Some freakish effect of the Blast there formed a pegmatite bubble and preserved everything inside it. Most of a big library and part of the street in front of it. Even got a street sign: Luckie Street. I'll say it was lucky!"

"*Librarian* Patterson," Parker-Horst spat icily, "if you have completed your lecture, perhaps you can spare a few minutes for Eurica. Are you alone? This is classified."

Patterson flushed again. "Forgive me, Excellency, but this is the find of a lifetime. Uh, no, I'm not alone. I'm in our biggest screening room, and it's swarming with technicians. I can, uh, be in my office in three minutes. Is that all right?"

Patterson, panting hard, keyed his communicator wordlessly in just over two minutes. Parker-Horst appeared on the screen, still frighteningly calm. "Alone now? Good. I'm calling on you because you have odd bits of information that nobody

else seems to have. I need an odd datum."

Patterson was catching his breath. "Yes, Excellency?"

"I want to know whatever you can find on the subject of a financially inferior entity suddenly become superior. What happens to the entity, and what happens to everyone else involved? And if it's bad, what was done about it?"

"Entity?" Patterson goggled.

"Yes, entity. Citizen group, interest group, professional group, anything. Pre-Blast nation even, if you have anything on that. Anything. And hurry." The chancellor broke the connection and his fingers hovered briefly over the keys. But he realized that he had already done everything that he could do. And all of the answers would take time coming in. Resignedly he keyed his chief secretary and ordered dinner sent to his office.

Time passed agonizingly. The chancellor extended his dinner as long as possible, then allowed himself the luxury of a session with his rare and yellowed pre-Blowup books on history and political science. He loved them, yet they were painful to him because they reminded him of the shadow on his own family line.

Part of the foundation of Eurica had been a massive relocation of people. Gonwonda had followed a similar principle, except that a number of individuals considered particularly dangerous had been removed in a spectacular firing squad performance; both the Mercan and Frikan portions of Gonwonda had histories of drastic political remedies. And the lack of any such accommodation was what made Asianesia so dangerous now.

There had been painful, guilt-laden transplantations, and the "Horst" of Parker-Horst represented one of them. The military families of old Prussia had been evenly scattered over all of Eurica. Remembering his recent curt efficiency in dealing with Nowotny's report, he wondered whether the resettlement had been entirely effective. Guiltily he realized that he knew a great deal about Prussia and very little about the rest of pre-Blowup Eurp.

Time passed excruciatingly. Schimmel-Jones was the first to report. "Excellency, fourteen humans, for various reasons, have achieved with Ysterii a relationship which can be described as close and personal. Of these, six were completely negative for our purposes; the human had no intimation of any plot against Eurica. Presumably the same is true of the six Ysterii involved."

"But the other eight?"

"Ah, there we got a remarkably consistent picture, considering that each individual was examined separately, by methods probing the central psyche. Not one of them was in the least aware at the conscious

level of anything amiss. Remarkable!"

"And that picture?" suggested Parker-Horst with dangerous politeness.

"Certainly, Excellency, certainly. All agree that Ysterbaq signed the treaty with perfect candor, and if challenged would take vigorous action against any Ysterii who, uh, are trying to subvert that treaty."

"Ah," breathed the chancellor. "Then there really is a plot?"

"Excellency, it seems that a small but organized number of Ysterii were outraged by the treaty because they believe that any species that has not achieved planetary government must be, uh, subhuman —subintelligent—and, therefore, the treaty is a blemish on Ysterii honor because it represents an accommodation with base animals—us."

"And?" nudged Parker-Horst.

"And the leaders of this faction diligently studied our history and decided that they could upset our planetary balance—and that Ysterbaq would never notice, because to most Ysterii a planet is an integrated unit. But with Asianesia on top, there almost certainly would be war somewhere. I haven't been able to figure out what Ysterbaq would do in that case, except that it wouldn't be good."

"Do you have enough facts to serve as the basis of a formal protest?"

Schimmel-Jones looked unhappy. "As a matter of fact, Excellency, that could be almost as bad for us. Remember, the treaty represents earth as a unified body having three administrative parts. At the time when it was drawn up, that was virtually the truth. But now—" he left the sentence hanging in air.

"Keep this affair absolutely secret for now—and if you come up with any ideas, let me know. At any time." Keeping his face carefully blank, Parker-Horst broke the connection, then allowed himself the luxury of a discouraged sigh.

Picking up the crumbling volume that he had been reading, he read the same sentence three times and then carefully put the book away, unable to concentrate on it. Why had geography been so unfair? Ysterbaq was an archipelago planet, and biologically the Ysterii were somewhere between the earthly tortoise and the porpoise: functional on land, breathing air, but most at home in the water. For a mad moment he contemplated the oddly balanced words *porpoise* and *tortoise*.

How natural that the Ysterii should prefer the island communities of the Asianesian Pacific! With a covert Ysterii campaign to equip its island communities with all the necessary trappings for Ysterii sports, and to urge the Ysterii to visit those places and spend their credits freely there, how natural that the economy was being unbalanced! It might have happened even

without the plot, but the plot had made it happen quicker.

His communicator chimed and the screen displayed Librarian Patterson's bony face. "Excellency, there was nothing of interest in the main memory tank, but our quick-read team discovered several interesting items in some magazines from the Kennesawia shipment. The magazine, you know, was a publication—"

"I do know. I am reasonably familiar with the pre-Blowup magazine. Please continue."

Patterson flushed, stammered, and began again. "We found several interesting items—you surely will want to inspect them personally, so I've sent them to you by pneumotube. There will probably be more when we reduce all the new material to tape and put it in the memory tank, although I do wonder about this pre-Blowup English. A most inexact language! We may—"

"I'm sure that you will solve all such problems. If they are critical, you may even become an elector. But you said that you had found something?"

"Yes, Excellency. Several references to two episodes. Well, only one reference to the first episode, which seems to have been some sort of racial minority in the old Unitistates, accustomed to severe poverty. In the last major war before Blowup, some of them were employed at a place called Campblanding. Other members of the same group engaged in something called skingame, apparently some sort of dishonest gambling enterprise."

"And?"

"And the skingame persons deprived the other group members of their earnings. The commanding officer, the official in charge, found out about it and demanded that the skingame persons be removed."

"That would seem reasonable. But what—?"

"Forgive me, Excellency," blurted Patterson, full of new knowledge. "Two days later, none of the minority group reported for work. The commanding officer asked what was the matter, and was told that the workers had all the money they needed and would not come back until they were destitute again."

"Interesting, but not applicable to our problem." The chancellor suddenly remembered that he had not discussed the problem with Patterson. "That episode does not relate to the situation," he hedged.

"Excellency, that's not all. The commanding officer of Campblanding thought about his problem and then ordered that the skingame people be brought back. After that, there was no more trouble. Everybody worked, and the skingame people cheated the workers out of their surplus earnings."

"Hm-m-m. Patterson, you have just earned my respect. What was the other episode?"

"During this same last big war before Blowup, the Euricans—of course they weren't called that at the time—needed some of the islands of what is now Asianesia for their warcraft. They still used earth oil distillate then, and could fly only a few thousand kilometers. They needed native laborers to build the ground structures that the warcraft needed. And the same thing happened."

"Same thing?"

"Excellency, the Euricans paid no less than their moral background allowed. But the Asianesians, after a few days, had all the wealth that they wanted. There were no more workers. And, I might add, there were no skingame persons available in those far islands."

"So what did they do?" demanded Parker-Horst, wondering what he would have done.

"The Euricans? They brought in mail-order catalogues—special books describing merchandise that certain Unitistates firms were equipped to post to customers. They showed pictures of the merchandise, those catalogues did. And the scheme worked. The islanders wanted those pictured things and went back to work. Of course, the island civilizations were completely destroyed—but the Euricans got their laborers."

The chancellor absently rubbed his chin. "Librarian, if my new impression of you is correct, you have included one of those mail-order things in your pneumotube capsule."

Patterson blushed modestly. "Two, Excellency."

"Librarian, I will be in touch with you later; I suspect that your status will change shortly. But there's an urgent override signal on my communicator, and only half a dozen people on earth can manage that. Excuse me." The chancellor keyed his communicator, and Patterson's face was replaced with that of Parker-Horst's wife, Elaine.

"I understand that there's a crisis. Are you in danger?" her image demanded as soon as it steadied on the screen.

"My dear, I shall have to ask Schimmel-Jones to look into your methods. Our information-gathering systems would be considerably improved," he bantered.

Her face remained sternly serious. "Are you all right?" she demanded.

The smile vanished from Parker-Horst's hawklike face. Noticing that his cold pipe was leaning on his ashtray, he idly picked it up. "I'm as 'all right' as any of us. We've just discovered a rather surprising plot against Eurica—I'd rather not say any more over the communicator. But I'm mobilizing the appropriate forces. Nobody will be in any real danger for at least four months—not even me. But I may be at my desk for a few extra hours tonight."

"Is it . . . oh, the communica-

tor. All right, I won't ask. But you're safe?"

"Safe as anybody. If I'm not home in time to be with the children for their evening romp, tell them I'm busy building a lion cage."

"Li . . . uh." Elaine broke the circuit. An elector in her own right, she was quick and clever. Parker-Horst realized that she remembered that the original contact mission to the Ysterii had been called Project Lion, and that she would understand that the present crisis concerned the aliens.

Moments later his fifth secretary deferentially entered his office. "A priority pneumotube capsule, Excellency," she apologized, handing him a batch of booklike objects which he recognized as pre-Blowup magazines. From most of them protruded a white slip—place-markers, obviously, that Patterson had inserted.

"Thank you," acknowledged Parker-Horst, accepting the priceless relics. He had read about magazines and knew approximately what they were, but never before had he seen one. His own generation could afford neither the paper nor the editorial effort. Unconscious of the departing secretary, he opened one at random, for the moment ignoring Patterson's careful place-markers. And the page that he saw startled him.

DRINK BURPSI BUBBLES, demanded flaming letters five centimeters high. The rest of the page was devoted to a photograph of a Burpsi Bubbles bottle surrounded by chunks of coldly blue ice. There were no more words, but briefly the chancellor felt a surprising urge to snatch that bottle from the yellowing page and quaff a refreshing draught from that archaic bottle. He swallowed dryly; he was thirsty.

He had read about such things, but never before had he seen an example. History had recorded the triumphs of advertising, and the counterwave of consumer incredulity. The popular reaction to the propaganda of the various governments promoting Blowup, after the gross fallout had settled and been washed away, had been the final factor. After Blowup, no Eurican had been much influenced by advertising—which now depended heavily on logic and proof.

The chancellor relit his pipe, trying to remember something that his instinct insisted was important. Transport to Ysterbaq? Translation of the alien language? Citizen's rights? And then it came to him: the alien Ysterii with sunglasses, cameras, and shoulderbags full of maps, brochures, and booklets—just like human tourists. And no data contested the fact that Ysterii, for all of their strange appearance, thought and acted very like humans.

Intelligence must be a common denominator, thought Parker-Horst as he reached for the communicator.

Four months later, Chancellor

Parker-Horst declared an afternoon holiday for himself and Elaine. As he tooled his hovercar into Pennsvania Avenue, he noted that the sidewalks were still teeming with Ysterii tourists, their sunglasses, cameras, guidebooks as evident as ever. But, he knew, there was a difference. Most of these Ysterii would spend their entire vacations in Eurica; only a few would dip into the Pacific waters of Asianesia.

"Two weeks to Deadline Day," he smiled, "and not more than five people will know it."

"Dead . . . oh, the date Nowotny gave you. There isn't a Deadline Day any more. There won't ever be a Deadline Day now, will there?"

Parker-Horst eased the hovercar into the fast lane as it approached Morial Bridge. "I trust not," he agreed, glancing at her. Elaine was a glory-burst of gold and blue when she worked at it—and today she had been working at it.

"But how did you do it?" she demanded, lightly touching her hair to be sure that her cascade coiffure had not been disturbed by the backwash of the hovercar. The chancellor liked to ride with the top open, and the hovercar was running at top speed. ISLAND BOUNCE FIVE KILOMETERS blazoned a bilingual sign in English and Ysterriq as the car rounded a gentle curve.

"Nothing to it, once we understood the situation," he explained, draping his right arm over her shoulder and drawing her closer to him.

"Nothing?" She resisted the pressure, looking up into his hard face.

"Nearly nothing," he amended, pulling harder. "First, we applied Elector Patterson's mail-order suggestion. It worked very well. At least a third of the surplus wealth introduced into Asianesia came back to Eurica—and Eurica picked up status as the right place to spend credits."

"But the other two thirds?"

"Nothing, really. Eurica already had a number of recreation areas ideal for Ysterii who wanted to engage in the same sports that are popular back home. Both Amrica and Eurp had resort areas nearly equal to those of Asianesia, and the Electorate of Anzakia with its living coral was a gold mine. We merely developed them."

"But what about the other two thirds of the wealth? What about that?"

"We relocated it. Say that you're a Ysterii. Every year you take a vacation: swimming, surfboarding, diving, waterskiing. Then someone tells you that a vacation paradise has opened up on a strange alien world a mere eleven light-years away. Are you going to be satisfied with the same old sports—after paying for interstellar transit—or would you rather try mountain climbing, big-game hunting, stock-car racing, or some other strange new thrill?"

"Hm-m-m," commented Elaine, relaxing slightly.

"Best of all, the new sports will allow the Ysterii to work off their aggressions peacefully. For almost two years they have been sparring with us, human and Ysterii each subconsciously considering himself superior—psychologically they're very like us, you know. And now we can compete directly—human against Ysterii—in stock-car racing, big-game hunting, mountain climbing, as well as in bridge, chess, and go."

"But how did all this happen? In their first year on earth none of them went mountain climbing, if you discount their geologists and other scientists who were after facts, not fun."

"Did you notice that 'island bounce' sign a few kilometers back? Actually, that particular recreation features a combination of water-skiing and kite riding. There are millions of such signs on our freeways. And the interplanetary carriers are loaded with tri-di brochures showing our sights, our attractions, our playgrounds. And back on Ysterbaq there are posters showing the same things—and we also place information spots on their television programs. We hit them with our secret weapon."

"Secret weapon?" she echoed, suddenly yielding to his embracing arm. "What's that?"

Pulling her close to him, he keyed the hovercar to full automatic. "The first mission we called Project Lion. This second mission of equalizing Ysterii and humans we call Project Island Bounce. It's working."

"But what was it?" .she demanded, turning her face up to his. "What did you use?"

"Advertising-" he chortled, kissing her soundly as he raised the translucent canopy. ■

FEBRUARY 1968

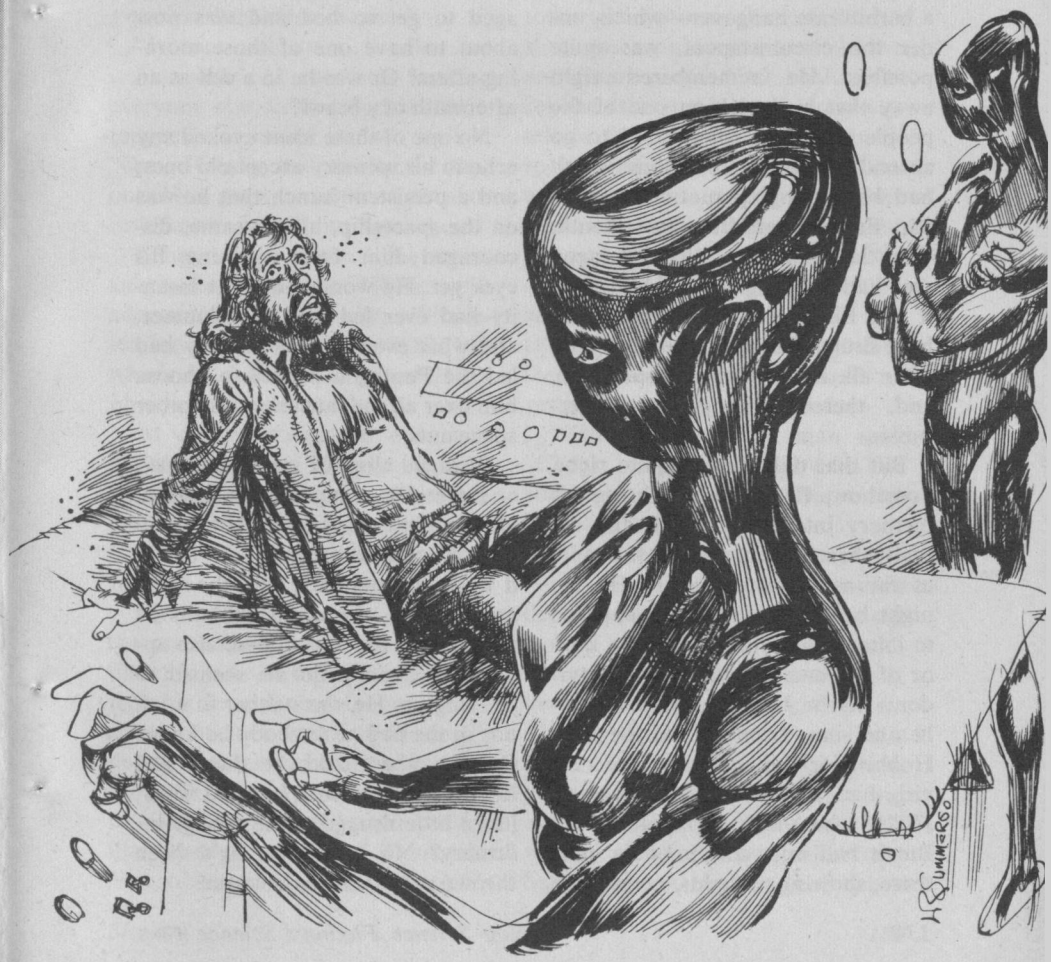
PLACE	TITLE	AUTHOR	POINTS
1	The Horse Barbarians (Pt. 1)	*Harry Harrison*	1.42
2	Peek! I See You	*Poul Anderson*	2.81
3	The God Pedlars	*Jack Wodhams*	2.85
4	Optimum Pass	*W. Macfarlane*	3.57
5	"If the Sabot Fits . . ."	*Walt and Leigh Richmond*	4.02

THE EDITOR

Skysign

In which it is proven that one does not have to be a devout theist to be motivated by the Fear of God!

JAMES BLISH
ILLUSTRATED BY LEO SUMMERS



"Und ein Schiff mit acht Segeln
Und mit fuenfzig Kanonen
Wird entschwinden mit mir."

Pirate-Jenny:
"The Threepenny Opera"

I

Carl Wade came back to consciousness slowly and with a dull headachy feeling, as though fighting off a barbiturate hangover—which, under the circumstances, was quite possible. He remembered right away that he had been one of the people who had volunteered to go abroad the alien spaceship which had been hanging motionless over San Francisco for the last month. The "lay volunteer," the Pentagon men had insultingly called him. And it was likely that the aliens would have drugged him, because to them, after all, he was only a specimen, and, therefore, possibly dangerous—

But that didn't seem quite right. Somehow, he could not bring his memory into focus. He hadn't actually been taken aboard the ship, as far as he could recall. On the night before he had been supposed to join the volunteer group, in honor of his own approaching martyrdom—as he liked to think of it—he and some friends from the local Hobbit Society, including the new girl, had cycled up to Telegraph Hill to take a look at the great ship. But it had only continued to hang there, showing no lights, no motion, no activity of any kind except a faint Moon-highlight, as had been the case ever since it had first popped into view in the skies over Berkeley—it responded only to the answers to its own radio messages, only to answers, never to questions—and the club soon got bored with it.

And then what? Had they all gone off to get drunk? Had he managed to get to bed and was now about to have one of those morning-afters? Or was he in a cell as an aftermath of a brawl?

No one of these ideas evoked any echo in his memory except old ones; and a persistent hunch that he was on the spaceship, all the same, discouraged him from opening his eyes yet. He wondered what insanity had ever led him to volunteer, and what even greater insanity had led the Pentagon people to choose him over all the saucerites and other space nuts.

A vague clink of sound, subdued and metallic, caught his attention. He couldn't identify it, but somehow it sounded surgical. As far as it went, this matched with the quiet around him, the clean coolness of the air, and the unrumpled, also apparently clean pallet he seemed to be lying on. He was neither in a jail nor in the pad of anybody he knew. On the other hand, he didn't feel ill enough to be in a hospital ward; just a little drugged. The college infirmary? No, nonsense, he'd been thrown out of college last year.

In short, he *must* be on the ship, simply because this must be the day after yesterday. The thought made him squeeze his eyes still tighter shut. A moment later, further speculation was cut off by a feminine voice, unknown to him, and both pleasantly sexy and unpleasantly self-possessed, but obviously human. It said:

"I see you've given us his language, rather than him ours."

"It cops out on . . . rules out . . . avoids . . . obviates making everyone else on board guard their tongue," a man's voice replied. "Oan, I really had to dig for that one. He's got a constipated vocabulary; knows words, but hates them."

"That's helpful, too," the woman's voice responded. "If he can't address himself precisely, it'll matter less what *we* say to him. But what's he faking for, Brand? He's obviously wide awake."

At this Carl opened eyes and mouth to protest indignantly that he wasn't faking, realized his mistake, tried to close both again, and found himself gasping and goggling instead.

He could not see the woman, but the man called Brand was standing directly over him, looking down into his face. Brand looked like a robot—no; remembering the man's snotty remark about his vocabulary, Carl corrected himself: He looked like a fine silver statue, or like a silver version of Talos, the Man of Brass—and wouldn't Carl's faculty advisor have been surprised at how fast he'd come up with that one! The metal shone brilliantly in the blue light of the surgery-like room, but it did not look like plate metal. It did not look hard at all. When Brand moved, it flowed with the movement of the muscles under it, like skin.

Yet somehow Carl was dead sure that it wasn't skin, but clothing of some sort. Between the metallic eye slits, the man's eyes were brown and human, and Carl could even see the faint webbing of blood vessels in their whites. Also, when he spoke, the inside of his mouth was normal mucous membrane—black like a chow's mouth instead of red, but certainly not metal. On the other hand, the mouth, disconcertingly, vanished entirely when it was closed, and so did the eyes when they blinked; the metal flowed together as instantly as it parted.

"That's better," the man said. "Check his responses, Lavelle. He still looks a little dopey. Damn this language."

He turned away and the woman —her name had certainly sounded like Lavelle—came into view, obviously in no hurry. She was metallic, too, but her metal was black, though her eyes were gray-green. The integument was exceedingly like a skin, yet seeing her, Carl was even more convinced that it was either clothing or a body mask. He noticed a moment later, either she had no hair or else her skull cap—

if that was what she wore—was very tight, a point that hadn't occurred to him while looking at the man.

She took Carl's pulse, and then looked expertly under his upper eyelids. "Slight fugue, that's all," she said with a startling pink flash of tongue. Yet not quite so startling as Brand's speaking had been, since a pink mouth in a black face was closer to Carl's experience than was any sort of mouth in a silver face. "He can go down to the cages any time."

Cages?

"Demonstration first," Brand, now out of sight again, said in an abstracted voice.

Carl chanced moving his head slightly, and found that his horizon-headache was actually a faint, one-sided earache, which made no sense to him at all. The movement also showed him the dimensions of the room, which was no larger than an ordinary living room—maybe 12′ x 13′—and painted an off-white. There was also some electronic apparatus here and there, but no more than Carl had seen in the pads of some hi-fi bugs he knew, and to his eyes not much more interesting. In a corner was a drop-down bunk, evidently duplicating the one he now occupied. Over an oval metal door—the only shiplike feature he could see—was a dial face like that of a large barometer or clock, its figures too small to read from where he lay, and much too closely spaced.

Brand reappeared. After a moment, the shining black woman called Lavelle took up a position a few feet behind him and to his left.

"I want to show you something," the man said to Carl. "You can see just by looking at us that it would do you no good to jump us . . . to attack us. Do you dig . . . do you understand that?"

"Sure," Carl said, rather more eagerly than he had intended. As a first word, it wasn't a very good one.

"All right." Brand put both hands on his hips, just below his waist, and seemed to brace himself slightly. "But there's a lot more to it than you see at the moment. Watch closely."

Instantly, the silver man and Lavelle changed places. It happened so suddenly and without any transition that for a second Carl failed to register what he was supposed to have noticed. Neither of the two metal people had moved in the slightest. They were just each one standing where the other one had been standing before.

"Now—" the man said.

At once, he was back where he had been, but the gleaming black woman—man, that outfit was sexy! —was standing far back, by the oval door. Again, there'd been not a whisper, or hint of any motion in the room.

"And once more—"

This time, the result was much more confusing. The metal aliens seemed to have moved, but after a

while Carl realized that they hadn't; *he* had. The switch was so drastic that for an instant he had thought they—all three of them—were in another room; even the hands of the dial face looked changed. But actually, all that had happened was that he was now in the other bunk.

The switch made hash of a hypothesis he had only barely begun to work out: that the metal skins, or suits, made it possible for Brand and Lavelle to swap places, or jump elsewhere at will, by something like teleportation. If that was how it worked, then Carl might just hook one of those shiny suits, and then, *flup!* and . . .

. . . And without benefit of suit white or black, he was in the other bunk, huddled in the ruins of his theory and feeling damned scared. On the face of a cathode-ray oscilloscope now in his field of view, a wiggly green trace diagrammed pulses which he was sure showed exactly how scared he was; he had always suspected any such instrument of being able to read his mind. The suspicion turned to rage and humiliation when Lavelle looked at the machine's display and laughed, in a descending arpeggio, like a coloratura soprano.

"He draws the moral," she said.

"Possibly," said the silver man. "We'll let it go for now, anyhow. It's time for the next subject. You can get up now."

This last sentence seemed to be addressed to Carl. He stiffened for a moment, half expecting either the metal people or the room—or perhaps himself—to vanish, but since nothing at all changed, he slid cautiously to his feet.

Looking down at the feet, and on upward from there as far as he could without seeming vain about it, he discovered that he was wearing the same scuffed sneakers and soiled slacks he had been wearing when he had gone cycling with the Hobbit crowd, except that both the clothing and his own self under it had been given a thorough bath. He was offended by the discovery, but at the moment not very much. Did it mean that there really had been *no* events between that expedition to Telegraph Hill, and this nightmare?

"Am I on the ship?" he said. It was a difficult sentence to get out.

"Of course," said the silver man.

"But I never got to join the official party—or I don't think . . ."

"Nobody will come aboard with the official party, Jack. We selected the few we wanted from among the cats your people designated. The rest will cool their heels."

"Then what am I—"

"Too many answers," Lavelle said.

"Never mind," said the silver man. "It won't matter for long, chicklet. Come along, Mr. . . . Wade? . . . yes; we'll interview you later, and answer some of your questions then, if we feel up to it.

Lavelle, stay here and set up for the next live one. And Mr. Wade, one other thing: Should you feel ambitious, just bear in mind . . ."

The metal-skinned people changed places, silently, instantly, without the slightest preparation, without the slightest follow-through.

". . . That we're a little faster on the draw than you are," Brand finished from his new position, evenly, but his voice striking Carl's other ear like a final insult. "We need no other weapons. Dig me?"

"Yulp," Carl said. As a final word, it was not much better than his first.

The sheathed man led him out the oval door.

II

Numb as he had thought he was by now to everything but his own alarm, Carl was surprised to be surprised by the spaciousness of what they had called "the cages." His section of them reminded him more of an executive suite, or his imaginings of one—a large single bedroom, a wardrobe, a bathroom, and a sort of office containing a desk with a small TV screen and a headset like a cross between a hair-dryer and a set of noise-mufflers.

He had been marched to this in total silence by the silver man, through a long corridor where they had passed several others of the metal people, all of whom had

passed them by wordlessly and with their eyes as blanked out as Little Orphan Annie's. Once they had arrived at the cage, however, Brand had turned affable, showing him the facilities, even including a stock of clean clothes, and seating him at last at the desk.

"I'll talk to you further when there's more time," the silver man said. "At the moment we're still recruiting. If you want food, you can call for it through that phone. I hope you know that you can't get away. If you cut out of the cage, there'd be no place where you could wind up."

Brand reached forward to the desk and touched something. Under Carl's feet, a circular area about the size of a snow slider turned transparent, and Carl found himself looking down at the Bay area through nothing but ten miles or more of thin air. Even moderate heights had always made him sick; he clutched at the edge of the desk and was just about to lose his option when the floor turned solid again.

"I wanted you to see," Brand said, "that you really are aboard our ship. By the way, if you'd like to look through there again, the button for it is right here."

"Thanks," Carl said, calling up one of his suavest witticisms, "but no thanks."

"Suit yourself. Is there anything else you'd like, until we meet again?"

"Well . . . you said you were bringing more, uh, Earth people up here. If you could bring my wife I would . . . ?"

The answer to this was of only academic interest to Carl. He had been separated from Bea for more than a year, ever since the explosion about college; and on the whole it had been painless, since they had been civilized enough to have been married in the first place only at common law and that a little bit by accident. But it would have been nice to have had someone he knew up here, if only somebody with a reasonably pink skin.

The silver man said: "Sorry. None of the other males we expect to bring aboard will know you, or each other. We find it better to follow the same rule with females, so we won't have any seizures of possessiveness."

He got up and moved toward the door, which was the usual shape for doors, not oval like the last one. He still seemed relatively gracious, but at the door he turned and added:

"We want you to understand from the outset that up here, you own nobody—and nobody owns you but us." And with that, in a final silent nonexplosion of arrogance, he flicked into nothingness, leaving Carl staring with glazed eyes at the unbroached door.

Of course no warning could have prevented Carl, or anyone else above the mental level of a nematode, from trying to think about escape; and Carl, because he had

been selected as the one lay volunteer to visit the spaceship possibly because he had thought about spaceships now and then or read about them, thought he ought to be able to work out some sort of plan —if only he could stop jittering for a few minutes. In order to compose his mind, he got undressed and into the provided pajamas—the first time he had worn such an outfit in ten years—and ordered the ship (through the desk phone) to send him a bottle of muscatel, which arrived promptly out of a well in the center of the desk. To test the ship's good will, he ordered five other kinds of drink, and got them all, some of which he emptied with conscious self-mastery down the toilet.

Then he thought—jungling a luxurious bourbon-and-ginger abstractedly; the sound of ice was peculiarly comforting—why the hell *had* the Pentagon people picked him as the "lay volunteer," out of so many? The alien ship had asked for a sampling of human beings to go back to its far star, and of these, it had wanted one to be a man of no specialties whatsoever—or no specialties that the ship had been willing to specify. The Pentagon had picked its own sampling of experts, who probably had been ordered to "volunteer"; but the "lay volunteer" had been another matter.

Like everyone else, Carl had been sure the Pentagon would want the "lay volunteer" actually to be a master spy among all possible master spies, not a James Bond but a Leamas type, a man who could pass for anything; but it hadn't worked that way. Instead, the Pentagon had approved Carl, one slightly beat and more than slightly broke drop-out, who believed in magic and the possibility of spaceships, but—let us face it, monsters and gentlemen —didn't seem to be of much interest either to alien or to human otherwise.

Why, for instance, hadn't the "lay volunteer" the aliens wanted turned out to be a Bircher, a Black Muslim, a Communist, or a Rotarian—in short, some kind of fanatic who purported to deal with the *real* world—instead of a young man who was fanatic only about imaginary creatures called hobbits? Even an ordinary science-fiction fan would have been better; why was a sword-and-sorcery addict required to try to figure his way out of a classical spaceship clink?

Gradually, he began to feel—with pain, and only along the edges —that there was an answer to that. He got up and began to pace, which took him into the bedroom. Once there, he sat down nervously on the bed.

At once, the lights went out. Wondering if he had inadvertently sat on a trigger, he stood up again; but the darkness persisted.

Were the metal people reading his mind again—and trying to suppress any further thinking? It might well work. He was tired, and he'd

been out of practice at thinking anyhow. Well, he could lay down and pretend to be asleep. Maybe that would—

The lights went on.

Though he was dead sure that he hadn't fallen asleep, he knew that he was rested. He remembered that when he had looked down the sinkhole under the desk, lights had been coming on around the Bay. Gritting his teeth and swallowing to keep down the anticipated nausea, he went out to the desk and touched the button.

One glance was enough, luckily. It was high morning on Earth. A night had passed.

And what was the thought he had lost? He couldn't remember. The ship had finessed him—as easily as turning a switch.

III

He ordered breakfast; the ship delivered it. The bottles and glasses, he noticed, had been taken away. As an insulting aftermath, the ship also ran him another bath without his having ordered it. He took it, since he saw nothing to be gained by going dirty up here; it would be as unimpressive as carrying a poster around that sink hole. No razor was provided; evidently the ship didn't object to his beard.

He then went after a cigarette, couldn't find any, and finally settled for a slow burn, which was easy enough to muster from all his deprivations, but somehow wasn't as satisfying as usual. *I'll show them,* he thought; but show them what? They looked invulnerable—and besides, he had no idea what they wanted him for; all the official clues had been snatched away, and no substitutes provided.

How about making a play for Lavelle? But how to get to her? Carl knew nothing about these people's sexual taboos; they might just not give a damn, like most Earth people on a cruise. And besides, the girl seemed pretty formidable. But lush; it would be fun to break her down.

His stomach twinged and he got up to pace. The trouble was that he had nothing to impress Lavelle with but his build, which really wasn't any better than Brand's. His encyclopedic knowledge of the habits of hobbits wasn't going to crush any buttercups around here, and he doubted that being able to sing "Fallout Blues" in two separate keys would, either. Damnit, they'd left him nothing to *work* with! It was unfair.

Abruptly remembering last night's drinks, he stopped at the desk and tried asking for cigarettes. They materialized instantly. Well, at least the aliens weren't puritans—that was hopeful. Except that he didn't want a complaisant Lavelle; that wouldn't show anybody anything, least of all himself. There was no particular kick in swingers.

But if they gave him drinks and butts, they might just let him roam about, too. Maybe there was somebody else here that he could use, or some other prisoner who could give him clues. For some reason the thought of leaving the cage sparked a brief panic, but he smothered it by thinking of the ship as a sort of convention hotel, and tried the door.

It opened as readily as the entrance to a closet. He paused on the threshold and listened, but there was absolutely no sound except the half-expected hum of machinery. Now the question was, supposing the opening of the door had been an accident, and he was *not* supposed to be prowling around the ship? But that was their worry, not his; they had no right to expect him to obey their rules. Besides, as Buck Rogers used to say under similar circumstances, there was only one way to find out.

There was no choice of direction, since the corridor's ends were both unknown. Moving almost soundlessly—one real advantage of tennis shoes—he padded past a succession of cage doors exactly like his own, all closed and with no clues for guessing who or what lay behind them. Soon, however, he became aware that the corridor curved gently to the right; and just after the curve passed the blind point, he found himself on the rim of a park.

Startled, he shrank back, then crept forward still more cautiously. The space down the ramp ahead was actually a long domed hall or auditorium, oval in shape, perhaps five city blocks in length and two across at the widest point, which was where the opening off the corridor debouched. It seemed to be about ten stories high at the peak, floored with grass and shrubbery, and rimmed with small identical patios—one of which, he realized with a dreamlike lack of surprise, must back up against his own cage. It all reminded him unpleasantly of one of those enlightened zoos in which the animals are allowed to roam in spurious freedom in a moated "ecological setting."

As he looked down into the park, there was a long sourceless sigh like a whisper of metal leaves, and doors opened at the back of each patio. Slowly, people began to come out—pink people, not metal ones. He felt a brief mixture of resentment and chagrin; had he stayed in his own cage, he would have been admitted to the park automatically now, without having had to undergo the jumpy and useless prowl down the companionway.

Anyway, he had found fellow prisoners, just as he had hoped; and it would be safer down there than up here. He loped eagerly downhill.

The ramp he was following ran between two patios. One of them was occupied by a girl, seated upon a perfectly ordinary camp chair and reading. He swerved, braking.

"Well, hi there!" he called to her.

She looked up, smiling politely but not at all as pleased to see another inmate as he could have hoped. She was small, neat and smoky, with high cheekbones and black hair—perhaps a Latin Indian, but without the shyness he usually counted upon with such types.

"Hello," she said. "What have they got you in for?"

That he understood; it was a standard jailhouse question.

"I'm supposed to be the resident fantasy fan," he said, in an unusual access of humility. "Or that's my best guess. My name's Carl Wade. Are you an expert?"

"I'm Jeanette Hilbert. I'm a meteorologist. But as a reason for my being here, it's obviously a fake—this place has about as much weather as a Zeppelin hangar. Apparently it's the same story with all of us."

"How long have you been here?"

"Two weeks, I think. I wouldn't swear to it."

"So long? I was snatched only last night."

"Don't count on it," Jeanette said. "Time is funny here. These metal people seem to jump all around in it—or else they can mess with your memory at will."

Carl remembered the change in the clock face, back when Brand and Lavelle had been showing off their powers for him. It hadn't occurred to him that time rather than space might have been involved, despite that clue. He wished he had read more Hubbard—something about transfer of *theta* from one MEST entity to another—no, he couldn't recapture the concept, which he had never found very illuminating anyhow. Korzybski? Madame Blavatsky? The hell with it. He said:

"How'd you come on board?"

"Suddenly. I was taken right out of my apartment, a day after NASA volunteered me. Woke up in an EEG lab here, having my brainprints taken."

"So did I. Hm-m-m. Any fuzzy period between?"

"No, but that doesn't prove anything." She looked him over, slowly and deliberately. It was not an especially approving glance. "Is that what fantasy fans usually wear?"

He was abruptly glad that his levis and shirt were at least clean, no matter how willy-nilly. "Work clothes," he explained.

"Oh. What kind of work?"

"Photography," he said, masking a split-second's groping with his most winning smile. It was, he knew, a workable alias; most girls dream of posing. "But they didn't bring my cameras and stuff along with me, so I guess I'm as useless as you are, really."

"Oh," she said, getting up, "I'm not sure I'm so useless. I didn't bring my barometer, but I still have my head."

Dropping her book on the chair,

she swung away and went back into her cage, moving inside her simple dress as flexibly as a reed.

"Hey, Jeanette . . . I didn't mean . . . just a . . ."

Her voice came back: "They close the doors again after an hour." Then, as if in mockery, her own door closed behind her, independently.

For want of anything else to do, he stepped into the patio and picked up the book. It was called "Experimental Design," by one Sir Ronald Fisher, and the first sentence that he hit read: "In fact, the statement can be made that the probabiliy that the unknown mean of the population is less than a particular limit, is exactly P, namely $Pr\ (u < \bar{x} + ts) = P$ for all values of P, where t is known (and has been tabulated as a function of P and N)." He dropped the thin volume hastily. He had been wondering vaguely whether Jeanette had brought the book with her or the ship had supplied it, but suddenly he couldn't care less. It began to look as though all the chicks he encountered on this ship had been born to put him down.

Disappointed at his own indifference, he remembered her warning, and looked quickly back at the top of the gangway down which he had come. It was already closed. Suppose he was cut off? There were people down there in the park that he still wanted to talk to—but obviously not now. He raced along the esplanade.

He identified his own cage almost entirely by intuition; and it seemed that he was scarcely in it five minutes before the door to the patio slid shut. Now he had something else to think about, and he was afraid to try it, not only because it was painful, but because despite Jeanette's theories about time and memory, he still thought it very likely that Lavelle and her consort could read his mind. Experience, after all, supported all three theories indifferently, thus far.

But what about the *other* door? Increasingly it seemed to him that he hadn't been intended to go through it. He had been told that he couldn't get out of his cage; and the one hour's access to the park was nothing more than admission to a larger cage, not any sort of permission to roam. The unlocked outer door had to have been an accident. And if so, and if it were still open, there should still be all sorts of uses he might make of it—

He froze, waiting to be jumped into the next day by the mind readers. Nothing happened. Perhaps they could read his mind, but weren't doing it at the moment. They couldn't be reading everybody's mind every minute of the day; they were alien and powerful, but also very obviously human in many important ways. All right. Try the outer door again. There was really nothing in the world that he wanted

to do less, but the situation was beginning to make him mad, and rage was the only substitute he had for courage.

And after all, what could they do to him if they caught him, besides knock him out? The hell with them. Here goes.

Once more, the door opened readily.

IV

The corridor was as eventless as ever; the ramp to the park now closed. He continued along the long smooth curve, which obviously skirted the park closely, just outside the cage doors. Once he stopped to lay his ear to one of the cages. He heard nothing, but he did notice a circle with a pattern of three holes in it, like a diagram of a bowling ball, just where the lock to an ordinary door would be placed for someone of Brand's height.

That made him think again as he prowled. So the metal people needed handles and locks! Then they couldn't jump about in space as magically as they wanted you to think they could. Whatever the trick was, it wasn't teleportation or time-travel. It was an illusion, or something else to do with the mind, as both Carl and Jeanette had guessed: memory blanking, or mind reading. But which?

After he had crept along for what seemed like a mile, the elliptical pathway inflected and began to broaden. Also, there was a difference in the quality of the light up ahead: it seemed brighter, and, somehow, more natural. The ceiling was becoming higher, too. He was coming into a new kind of area; and for some reason he did not stop to examine—perhaps only that the inside curve of the corridor was on his right, which as evidence was good for nothing—he felt that he was coming up on the front of the ship.

He had barely begun to register the changes when the corridor put forth a pseudopod: a narrow, shallow metal stairway which led up to what looked like the beginning of a catwalk, off to the left. He detoured instinctively—in the face of the unknown, hide and peek!

As he went along the outward curving catwalk, the space ahead of him continued to grow bigger and more complicated, and after a few minutes he saw that his sensation that he was going bowwards had been right. The catwalk ran up and around a large chamber, shaped like a fan opened from this end, and ending in an immense picture window through which daylight poured over a cascade of instruments. On the right side of the room was a separate, smaller bank of controls, divided into three ranks of buttons each arranged in an oval, and surmounted by a large clock face like the one Carl had noticed when he first awoke in the ship's

EEG room. The resemblance to the cockpit of a jet liner was unmistakable; this was the ship's control room.

But there was something much more important to see. Brand—or someone almost exactly like him—was sitting in one of two heavy swivel seats in front of the main instrument board, his silver skin scattering the light from the window into little wavelets all over the walls to either side of him. Occasionally he leaned forward and touched something, but in the main he did not seem to have much to do at the moment. Carl had the impression that he was waiting, which the little flicks of motion only intensified—like a cat watching a rubber mouse.

Carl wondered how long he had been there. From the quality of the light, the time was now either late morning or early afternoon—it was impossible to guess which, since Carl could not read the alien clock.

A movement to the right attracted both men's attention. It was a black-metaled woman: Lavelle. Of this identification Carl was dead sure, for he had paid much closer attention to her than to her consort. Lifting a hand in greeting, she came forward and sat down in the other chair, and the two began to talk quietly, their conversation interspersed with occasional bursts of low laughter which made Carl uncomfortable for some reason he did not try to analyze. Though he could catch frequent strings of syllables and an occasional whole sentence, the language was not English, Spanish or French, the only ones he was equipped to recognize; but it was quite liquid, unlike a Germanic or Slavic tongue. Ship's language, he was certain.

Their shadows grew slowly longer on the deck; then it must be afternoon. That double prowl up the corridor must have taken longer than he had thought. He was just beginning to feel hungry when there was a change that made him forget his stomach completely.

As the metal people talked, their voices had been growing quieter and a little more husky. Now, Brand leaned forward and touched the board again, and instantly, like flowers unfolding in stop-motion photography, the metal suits—aha, they *were* suits!—unpeeled around them and seemed to dissolve into the chairs, leaving them both entirely nude.

Now would be the time to jump them, except that he was quite certain he couldn't handle both of them. Instead, he simply watched, grateful for the box seat. There was something about the girl besides her nudity that was disquieting, and after a while Carl realized what it was. Except for her baldness, she bore a strong resemblance to the first girl he had ever made time with by pretending to be a photographer, a similarity emphasized by the way she was sitting in the chair.

Obviously the pose was not lost

on Brand, either. He got to his feet with a lithe motion, and seizing her hand, pulled her to her feet. She went to him freely enough, but after a moment struggled away, laughing, and pointed at the smaller control board, the one with the clock. Brand made an explosive remark, and then, grinning, strode over to the board and . . .

. . . The room was dark and empty. Blinking amazedly, Carl tried to stir, and found that his muscles were completely cramped, as if he had been lying on the metal ledge in the same position all night.

Just like that, he had the key in his hands.

He began to work out the stiffness slowly, starting with fingers and toes, and surveying the control room while he did so. The room was not really completely dark; there were many little stars gleaming on the control boards, and a very pale dawn was showing through the big window. The large hand on the clock face had jumped a full ninety degrees widdershins.

When he felt ready to take on a fight if he had to—except for his hunger, about which he could do nothing—Carl went back to the stairs and down into the control room, going directly to the smaller of the two boards. There was no doubt in his mind now about what those three ovals of buttons meant. If there was any form of dialogue he understood no matter what the language, it was the dialogue of making out. As plain as plain, the last two lines the denuded metal people had spoken had gone like this:

LAVELLE: But suppose somebody (my husband, the captain, the doctor, the boss) should come in?

BRAND: Oh hell, I'll (lock the door, take the phone off the hook, put out the lights) fix that!

Blackout.

What Brand had done was to put everyone on board to sleep. Out of the suits, he and Lavelle must have been immune to whatever effect he had let loose, so that they could play their games at leisure. A neat trick; Carl wouldn't mind learning it—and he thought he was about to.

Because Carl himself was awake now, it was pretty clear that the other prisoners were also; maybe they had been freed automatically by the passage of the clock past a certain point in the morning, and would be put back to sleep just as automatically after supper. It also seemed clear that for the prisoners, the effect didn't depend upon wearing one of the metal suits *or* being in the cages, since Carl had been knocked out up on the catwalk, almost surely unsuspected. The suits must be the captain's way of controlling the crew—and that meant that Brand (or Brand and Lavelle) must run the shop, since this board was too powerful to allow just anybody to fool with it. Carl rubbed his hands together.

One of these three circles must represent the crew; another, the cages; the third—well, there was no telling who was controlled by those buttons—maybe crew and prisoners at once. But the oval in the middle had the fewest number of buttons, so it was probably a safe bet that it controlled the cages. But how to test that?

Taking a deep breath, Carl systematically pressed each and every button on the left-hand oval. Nothing happened. Since he himself was not now sprawled upon the deck, unconscious again, he could now assume that the crew was once more fast asleep—with the unavoidable exception of any who had been out of their suits, like the lovers.

Now for the sparser oval. Trying to remind himself that he now had plenty of time, Carl worked out by painful memory and counting upon his fingers just where the button which represented his cage probably was. Then, starting one button away from it, he again went all around the circle until he was one button on the opposite side of what he thought was his own.

It took him a long time, sweating, to work himself up to touching either of those two bracketing buttons, but at last, holding his breath, he pressed them both at once, watching the clock as he did so.

He did not fall and the clock did not jump.

The ship was his.

He was not in the slightest doubt about what he was going to do with it. He had old scores by the millions to pay off, and was going to have himself one hell of a time doing it, too. With an instrument like this, no power on Earth could stop him.

Of course he'd need help: somebody to figure out the main control board with him, somebody with a scientific mind and some technical know-how, like Jeanette. But he'd pick his help carefully.

The thought of Jeanette made him feel ugly, a sensation he rather enjoyed. She'd been snippy. There might be other women in the cages, too; and the aborted scene of last night in the control room had left him feeling more frustrated than usual. All right; first some new scores, and then he'd get around to the old ones.

V

It was high morning when he got back to the control room, but still it was earlier than he'd expected it to be. There hadn't been many women in the cages, but either they got less and less attractive as he went along, or the recent excitement and stress had taken more out of him physically than he'd realized. Otherwise he was sure he could have completed such a program handily, maybe even twice around. Oh well, there was plenty of time. Now he needed help.

The first thing to do was to dis-

connect the clock in some way. That proved to be easy: a red bar under it simply stopped it. Since nobody, obviously, had visited the control room since his last tampering, he now had the whole ship in permanent coma.

Next, he counted down to Jeanette's button and pushed it. That ought to awaken her. The only remaining problem was to work out how that three-hole lock on her cage worked.

That didn't turn out to be easy at all. It took an hour of fumbling before it suddenly sank inward under his hand and the door slid back.

Jeanette was dressed, and stared at him with astonishment.

"How did you do that?" she said. "What's wrong with the phone? Where's the food? Have you been doing something stupid?"

He was just about to lash back at her when he realized that this was no time to start the breaking-off routine, and instead put on his best master-of-the-situation smile, as if he were just starting up with her.

"Not exactly," he said. "But I've got control of the ship. Mind if I come in?"

"Control of the ship? But . . . well, all right, come in. You're in anyhow."

He came forward and sat down at her version of his desk. She backed away from him, only a little, but quite definitely.

"Explain yourself," she said.

He didn't; but he told her the rudiments of the story, in as earnest and forthright a manner as he had ever managed to muster in his life. As he had expected, she asked sharp technical questions, most of which he parried, and her superior manner dissolved gradually into one of intense interest.

All the same, whenever he made the slightest movement to stand up, she stepped slightly away from him, a puzzled expression flitting across her face and then vanishing again as he fed her new details. He was puzzled in turn. Though the enforced ship's-sleep hadn't prevented her from being highly responsive—in fact, it was his guess that it had helped—he was sure that she had never awakened even for a second during the morning and hence had nothing to blame him for. Yet it was obvious that she knew, somewhere in the back of her mind, that *something* had happened to her, and associated it with him. Well, maybe that would be helpful too, in the long run; a cut cake goes stale in a hurry.

When he was through, she said reluctantly: "That was close observation, and quick thinking."

"Not very quick. It took me all morning to work it out."

Again the flitting, puzzled expression. "You got the right answer in time. That's as quick as anybody needs to be. Did you wake anybody else?"

"No, just you. I don't know anybody else here, and I figured you

could help me. Besides, I didn't want a mob of released prisoners running around the ship kicking the crew and fooling with things."

"Hm-m-m. Also sensible. I must say, you surprise me." Carl couldn't resist a grin at this, but took care to make it look bashful. "Well—what do you suggest we do now?"

"We ought to figure out the main control board. See if it's possible for us to run the ship without anybody from the crew to help—and how many hands from the cages we'd need to do the job."

"Yes," she said thoughtfully. "At a guess, the main control board is as rational as the sleep-board is. And the two captains—Brand and Lavelle—must be able to run the ship from there all by themselves in a pinch; otherwise the threat of knocking all the rest of the crew out wouldn't have sufficient force. Interesting social system these people must have. I don't think I like them."

"Me either," Carl said with enthusiasm. "I hate people who whip serfs."

Jeanette's eyebrows rose. "The crew can't be serfs. They wear the metal suits—a powerful tool in any hands—and can take them off whenever they like if they want to duck the sleep-compulsion. But obviously they don't. They can't be serfs; they must be something like chattel slaves, who'd never dream of changing status except to other owners. But that is certainly not the most interesting problem."

"What is, then?"

"How the buttons put *us* to sleep. We don't wear the suits."

Since this was the problem Carl most badly wanted to solve secretly and for himself alone, it was the one he most badly wanted Jeanette not to think about; yet since he had no clues at all, he had to chance at least a tentative sounding before trying to divert her from it. He said: "Any ideas?"

"Not at the moment. Hm-m-m . . . did you have a headache when you first woke up on board?"

"I've got it still," he said, patting the back of his neck tenderly. "Why? Does that signify anything?"

"Probably not. I'll just have to look at the board, that's all. We'd better take a good look around."

"Sure. This way."

She was very thorough—exasperatingly so. Long after he would have been sure that he had seen everything, she would return to some small instrument complex she had looked at three or four times before, and go over it again as if she had never seen it before. She volunteered nothing except an occasional small puff of surprise or interest; and to his questions, she replied uniformly, "I don't know yet." Except once, when after she had bent over a panel of traveling tapes for what must have been twenty minutes, she had said instead, "Shut up for ten seconds, will you?"

In the meantime the sun was reddening toward afternoon again, and Carl was becoming painfully conscious of the fact that he had had nothing to eat since breakfast the day before. Every minute added without any food shortened his temper, reduced his attention span and cut into his patience. Maybe the girl was getting results, and maybe not, but he was more and more sure that she was putting him on. Didn't she know who was boss here?

Maybe she thought she could make a dash for the sleep-panel and turn *him* off. If she tried that, he would knock her down. He had never been that far away from the panel; he was on guard.

Suddenly she straightened up from the main board and sat down in one of the heavy swivel chairs. It promptly began to peel her clothes off. Though he had not told her anything about this trick, she got up so quickly that it left her only slightly shredded around the edges. She eyed the chair thoughtfully, but said nothing. For some reason this was her most galling silence of all.

"Got anything?" he asked harshly.

"Yes, I think so. These controls require an optimum of three people, but two can run them in an emergency. Ordinarily I think they use five, but two of those must be standbys."

"Could one man handle them?"

"Not a chance. There are really three posts here: pilot, engineer, navigator. The pilot and the navigator can be the same person if it's absolutely necessary. Nobody can substitute for the engineer. This ship runs off a Nernst-effect generator, a very tricky form of hydrogen fusion. The generators idle very nicely, but when they're drawing real power they have to be watched—more than that, it takes a real musician's hand to play them."

"Could you do it?"

"I'd hate to have to try. Maybe with a month of ant-steps, saying 'May I' all the way. But if the thing blew at this altitude it'd take out the whole West coast—at a minimum. There's an awful lot of hydrogen in the Pacific; I wouldn't answer for what a Nernst fireball would really start."

"Good."

She swung on him, her brows drawing together. "What's good about it? What are you up to, anyhow?"

"Nothing very awful," he said, trying to be placating. "I'll tell you in a minute. First of all, have you figured out how to get the grub moving again? I'm starving."

"Yes, that's what the third oval on the sleep-board is—the phone system locks. There's a potentiometer system on the side of the board that chooses what's activated—food, phones, doors, and so on. If you'll move over a minute, I'll show you."

"In a minute," he said. "It's not

that I don't trust you, Jeanette, but you know how it is—now that I've got my mitts on this thing, I hate to let go of it."

"That figures. What are you going to do with it?"

"I don't know till I've got it doped better. First, how about this business of putting the prisoners crumped without any suits?"

"No," she said.

"Whadd'ya mean, no?" he said, feeling the ugliness rise again. "Listen, chick—"

He caught himself, but with an awful feeling that it was too late. She watched him damping himself down with sober amusement, and then said:

"Go on. That was the true hyena laugh."

He clenched his fists, and again fought himself back to normal, aware that she was observing every step of the process. He said:

"I'm sorry. I'm tired and hungry. I'll try not to snarl at you again. O.K.?"

"O.K." But she said nothing more.

"So what about this crump effect?"

"Sorry. I won't answer any more questions until you've answered one of mine. It's very simple. Once you've really got control of the ship—and you can't get it without me—what do you plan to do with it? You keep telling me you'll tell me 'in a minute.' Tell me now."

"All right," he said, his teeth on edge. "All right. Just remember that you asked me for it. If you don't like it, tough tibby—it's not my fault. I'm going to use this ship and everybody in it to set things straight. The warmongers, the bluenoses, the fuzz, the snobs, the squares, the bureaucrats, the Uncle Toms, the Birchers, the Fascists, the . . . everybody who's ever been *against* anything is going to get it now, right in the neck. I'm going to tear down all the vested interests, from here to Tokyo. If they go along with me, O.K. If they don't, blooey! If I can't put 'em to sleep, I can blow 'em up. I'm going to strike out for freedom for *everybody,* in all directions, and all at once. There'll never be a better chance. There'll never be a better weapon than this ship. And there'll never be a better man than me to do it."

His voice sank slightly. The dream was catching hold. "You know damn well what'd happen if I let this ship get taken over by the Pentagon or the fuzz. They'd suppress it—hide it—make a weapon out of it. It'd make the cold war worse. And the sleep gadget—they'd run all our lives with it. Sneak up on us. Jump in and out of our pads. Spy. All the rest. Right now's our chance to do justice with it. And that is what I'm going to do with it!"

"Why you?" Jeanette said. Her voice sounded very remote.

"Because I know what the underdog goes through. I've gone through

it all. I've been put down by every kind of slob that walks the Earth. And I've got a long memory. I remember every one of them. Every one. In my mind, every one of them has a front name, a hind name, and an address. With a thing like this ship, I can track every man jack of them down and pay them off. No exceptions. No hiding. No mercy. Just Justice. The real, pure, simple thing."

"Sounds good."

"You bet it's good "

"What about the Soviets? I missed them on your list, somehow."

"Oh sure; I hate Communists. And also the militarists—it was the Pentagon that sucked us into this mess up here to begin with, you know that. Freedom for everybody —at one stroke!"

She seemed to consider that. "Women, too?"

"Of course, women! The hell with the double standard! On both sides!"

"I don't quite follow you," she said. "I thought the double standard only had one side—the men could and the women couldn't."

"You know that's not so. It's the women who control the situation—they always can, they're the ones who get to say *no*. The real freedom is all on their side."

"How'd you fix that?" she said, in a voice almost sleepy.

"I . . . well, I haven't had much of a chance to think about it—"

"I think you've thought about it quite a lot."

Her shredded dress trailing streamers, Jeanette walked steadily away from the control board toward the corridor. Carl put his finger over her button.

"Stop!"

She stopped and turned, shielding her thighs with one hand in a peculiarly modest gesture, considering everything.

"Well?"

"I don't care what you think. If you don't dig it, that's your nuisance —sorry about that, Chief. But I need you; I'll have you."

"No you won't. You can put me to sleep, but you won't have me."

"Yes I will. I can wake you up. And I won't feed you. You'll spend all the rest of your time in your cage —hungry and wide awake. In the meantime, *I'll* fool with the boards. Maybe I'll wake somebody else who'll be willing to help. Maybe even one of the crew. Or maybe I'll make a mistake and blow everything up—if you weren't putting me on about that. Think about *that* for a while. Cooperate, or blooey! How about that?"

"I'll think about it," she said. But she went right on walking.

Carl bit his tongue savagely and turned back to the main boards. These do-gooders. In the pinch, they were all alike. Give them a chance to *do* something, and they chicken out.

Now it was up to him. It would be nice to know where to find Lavelle. But it was nicer to be sure

that Jeanette had him dead wrong. He had a mission now and was above that stuff, at least for the time being. Once he'd reduced the world, he could do better than either of them.

Raging with hunger, he scraped his fingernails at the powerful little lights.

VI

But he had at last to admit that much of his threat had been simple bravado. The instruments and controls on the board were in obviously related groups, but without technical training he could not even figure out the general categories; and though everything was labeled, the very script the labels were written in was as unbreakable to him as an oscilloscope trace—which it strongly resembled.

Besides, his thinking was obviously not being improved by his having been without a meal for more than a whole day. He decided that he had better be reasonable. The only other course was to wake some crew member, on the chance that a random choice would net him a slave rather than an officer, and try to force him to read the inscriptions; but the risks in that were obvious and frightening. Unless he really wanted to blow up the joint —which in fact he had no intention of chancing—he had to make another try with Jeanette.

She didn't look nearly as haggard as he had hoped, but after all she had both eaten and slept a good deal more recently than he had. Realizing at the same time that he was not only haggard, but untrimmed and dirty, he made an extra effort to be plausible.

"Look, I'm sorry I frightened you. I'm tired, I'm hungry, and I'm on edge. Let's try to talk it all over again sensibly, like civilized people."

"I don't talk to jailers," she said coldly.

"I don't blame you. On the other hand, as long as you're bucking me, I have to keep some sort of control over you. You're the only other prisoner who knows as much as I know. Hell, you know *more* than I know about some things."

"The last I heard, you weren't just going to keep me locked up. You were going to torture me."

"What? I said no such—"

"No sleep, no food—what do you call it? Punishment? Persuasion?"

"All right," he said. "I was wrong about that. Why don't we start there? You tell me how to turn the food deliveries back on, and I'll do it. There's no harm in that. We'd both benefit."

"That's right, you're hungry, too. Well, it's controlled by that knob on the side of the sleep-board, as I told you. I'm not sure, but I think it's the third setting to the left—counterclockwise, that is."

"Good. I'll see to it that you get fed, and then maybe we can yak again."

At the door, he turned back suddenly. "This had better not be a gag. If that third setting wakes everybody up or something like that—"

"I don't guarantee a thing," Jeanette said calmly. "It's only my best guess. But I don't want the slavers awake again any more than you do. You're no picnic, but I like them even less."

The point was all the more penetrating for its bluntness. Back in the control room, he set the dial as per instructions, and then raced back to his own cage to try it out. The ship promptly delivered the meal he ordered, and he stuffed himself gorgeously. As an afterthought, he ordered and got a bottle of brandy. He was still determined to puzzle out the control boards as far as possible by himself, and in his present stage of exhaustion a little lubricant might make all the difference.

He knocked on Jeanette's door in passing, but there was no answer.

"Jeanette!" he shouted. "Jeanette, the food's on!"

Still no response. He wondered if the metal door would pass sound. Then, very faintly, he heard something like a whimper. After a long pause, there was another.

He went on, satisfied. He was a little surprised to find that she was able to cry—up to now she had seemed as hard as nails except in her sleep—but it would probably do her good. Besides, it was satisfying to know that she had a breaking point; it would make his persuasions all the more effective, in the long run. And in the meantime, she had heard him announce that there was food available, so she should have a little better opinion of his good faith.

He went on up the corridor, cheerfully whistling "Fallout Blues" in two keys at once.

The control room window showed deep night, and had for a long time, when he decided to call himself defeated—temporarily, of course. The brandy had calmed some of his jumpiness and done wonders for his self-confidence, but it hadn't brought into his head any technical knowledge, or any safe inspirations, either. And suddenly he was reelingly sleepy. The headache was worse, too.

There should be no danger in catching a little sack time. Everybody else was already out except Jeanette, and she was locked in. Of course, she was a sharp apple, and might figure some way of getting out. It would be better to crump her. She'd probably appreciate it, too. It would give him two pluses to start the next conversation with.

He pressed the button that controlled her, and then, avoiding the strip-tease chairs, rolled himself comfortably under the big board.

He awoke slowly and naturally; he had almost forgotten how it felt, after the popped-out-of-nothingness effect that the ship's imposed awakenings produced, and for a little

while he simply luxuriated in it. After all, there was no danger. The ship was his.

But it was unusually noisy this morning: a distant snarling of engines, an occasional even more distant murmur of voices—

Voices! He shot upright in alarm.

He was no longer aboard the ship.

Around him was the sunlit interior of a small room, unmistakably barracks-like, with a barred window, furnished only by the narrow single bed in which he had been lying. He himself was clad in gray military-hospital pajamas, and touching his face, he found that he was clean-shaven—his beard was gone—and had been given a GI haircut. A standard maroon military-hospital robe was folded neatly over the foot of the bed.

An aircraft engine thrummed again outside. Swearing, he ran to the window.

He was indeed locked up—beside a military airfield—which one, he had no way of telling, but at least it was American. It was also huge. There was a lot of traffic.

And there was the alien spaceship, right in front of him, grounded. It was probably as much as three miles away, but it was still so enormous as to cut off most of the horizon.

It had been captured—and Carl Wade with it.

He wasted no time wondering how it had been done, or lamenting the collapse of his fantasies, in which, he realized, he had never really believed. The only essential thing now was—*to get away!*

He spun to the door, and finding it locked, rattled it furiously.

"Hey!" he shouted furiously. "Let me out of here! You've got no right . . . I'm a civilian . . . a citizen . . ."

The lock clicked under his hand, and as he jumped back, there was the hard sound of a bolt being shot. The door opened and Jeanette came in, followed by two large, impassive, alert Air Force policemen. The girl looked fresh and beautiful; but she, too, had had a close haircut, all on one side; and there was a surgical compress taped under that ear.

"Good morning," she said.

He continued to back away until he found himself sitting on the bed.

"I might have guessed," he said. "So you got the upper hand and sold out."

"Sold out?" she said, her eyes flashing. "I had nothing to sell. I couldn't use the ship properly. I turned it over to people who could. My own people—who else?"

"All right, then you chickened out," Carl said. "It's the same thing. What are you going to do with me?"

"They tell me you'll be questioned and let go. In your circles, nobody'd be likely to believe anything you say. Just in case any reporter looks you up, the Pentagon's arranged an interview with *Time*. They'll treat your remarks as science fiction and that'll be the end of you as any sort of witness."

"And that's all?" he said, amazed.

"That's enough. You're not accused of any crime. Of course, I suspect you committed one against me—but considering that it didn't even wake me up, it can't have been much more than a token; just kid stuff."

This blow to his pride was almost more than he could take, but he was not going to try to set her straight with those two huge flics standing there. He said dully:

"How did you do it?"

"I figured out how the metal people induced sleep in us without our having to wear the metal suits. When they first took us on board, they installed a little broadcaster of the sleep-waves, surgically, right next to our skulls—under the right mastoid process. That was what that headache was."

Carl caressed his neck automatically. The headache was gone; all that was left was a neat and painless scar.

"But what did you do?"

"I took it out, with your help. When you turned the food service back on, I ordered a tough steak, and I got a sharp knife along with it. Awake, the metal people probably wouldn't have allowed that, but computers are brainless. So I cut the gadget out. As soon as I got the bleeding stopped, I went forward, found you asleep under the control board, and pressed *your* button. The rest was very simple."

He remembered the faint whimpers he had heard when he had passed her door that night. And he had thought she was softening up!

The worst of it was, in like circumstances he could never have done it. He was afraid of blood, especially his own.

"Jeanette . . . *why* did you do it?"

She was silent a long time. At last she said: "Do you believe in God?"

"Of course not!" he said indignantly. "Do you?"

"I don't know whether I do or not. But there's one thing I was sure of, right from the start: You'd be a damn poor substitute." ■

Curious Phenomenon

Why do they call them "flower children?" Flowers look beautiful and smell fresh and clean.

the reference library

P. Schuyler Miller

WHOSE REVOLUTION?

By all the usual signs and portents, "Dangerous Visions" (Doubleday & Co., Garden City, N.Y.; 1967; 520 pp.; $6.95) should be the most memorable SF anthology since Anthony Boucher's huge two-volume "Treasury of Great Science Fiction" came out in 1959.

The editor is Harlan Ellison, perhaps the most positive, vigorous individual who has ever adopted the science-fiction field as one of his major outlets. He has commissioned thirty-three previously unpublished stories from writers like Theodore Sturgeon, Frederik Pohl, Philip José Farmer, Philip K. Dick, Brian Aldiss, Poul Anderson, Damon Knight, Fritz Leiber, and an equally impressive selection of the newer writers in the field (Ballard, Delany, Spinrad, Zelazny, Brunner . . . they're all here). They add up to around a quarter of a million words.

These are, moreover, stories which were either written especially for the book, on a "no holds barred" guarantee, or which are supposed to have been too strong meat for the present SF magazines, English and American. As a bonus, you get a free-wheeling commentary by the editor on each author and story and a briefer comment by the author himself. There are short-shorts, and there is Philip José Farmer's "Riders of the Purple Wage," with some thirty thousand words—a "complete novel" in many a magazine.

The book is billed by Isaac Asimov, in his introduction, as the standard-bearer of a "Second Revolution" in science fiction. The first, of course, was the one John Campbell launched when he became editor of Astounding nearly thirty years ago.

Unfortunately, it doesn't live up to its billing.

In the first place, the "SF" of the anthology stands for "speculative fiction," not "science fiction." There's nothing wrong with this—

Judith Merril uses the same standard for her annuals—but it does open the book to straight fantasies and stories of the supernatural, allegories, parables, et al. There are, for example, no fewer than five stories in which God appears: Lester del Rey's "Evensong," Philip K. Dick's "Faith of Our Fathers," Damon Knight's "Shall the Dust Praise Thee?," Jonathan Brand's "Encounter with a Hick," and John Brunner's "Judas." The stories by Dick and Brunner are among the best in the book, and the one by Brand is right up in there, but in a collection dedicated to showing the scope and versatility of the new writers and of the field, five stories with essentially the same theme are too many. This is not to say that they duplicate each other in any way but the main gimmick, and they do illustrate the versatility of the authors: it's just that a good editor doesn't sound one note over and over in one issue of his magazine.

Let me hasten to say that Harlan *is* a good editor—his comments on the stories and their authors are almost the best part of the book, and his concept was an excellent one. Perhaps he hadn't time to prevent the essential duplications; perhaps the authors are to blame. It's still a flaw in this particular book.

As might be expected, sex-centered stories make up an important part of the "visions" that editors have found too dangerous for "family" magazines. However, only four of the thirty-three can be called "sex" stories—something, by the way, that I am supposed to dislike. However that may be, Farmer's "Riders of the Purple Wage" and Sturgeon's "If All Men Were Brothers, Would You Let One Marry Your Sister?" are among my choices of the best in the book, and Samuel R. Delany's "Aye, and Gomorrah . . ." nudges the top rank. I suspect that when Farmer enlarges his story into a complete novel, it will be even more outstanding as experimental writing that uses techniques from "Finnegan's Wake" and some of the touchiest themes of present-day society (ambisexuality; guaranteed wage; the mother-centered Negro ghetto society) in a truly extraordinary way. Yet it is Sturgeon with his rethinking of the incest taboo and Delany with his creation of a new "perversion" that is humanly believable who really show a creative approach to sex in stories of other worlds and other times. Carol Emshwiller's "Sex and/or Mr. Morrison," I am sorry to say, is more obsessive than convincing.

It would take two months of this department to really say much about the rest of the book, or even to outline the best stories. You're going to have to read it some day, and you can check my judgment then. I will say that my other favorites include Larry Niven's "Jigsaw Man," in which technology has revised morality and made death

cheap and trivial; Poul Anderson's "Eutopia," one of his subtly convincing stories of alternate time streams; Henry Slesar's "Ersatz," whose inevitable ending doesn't spoil it one bit; Sonya Dorman's "Go, Go, Go Said the Bird," a terrifyingly relentless story of cannibalism; Keith Laumer's "Test to Destruction," which is perhaps the best *story* in the book; Norman Spinrad's "Carcinoma Angels," in which hallucinogenic introspection is used to fight cancer; and Roger Zelazny's "Auto-da-Fé", a *tour de force* of the day of the mechador who makes three beautiful kills, then fights the mustard-colored Ford.

Enough good stories in what I've mentioned to make an outstanding book? Maybe so. But is it all that revolutionary? I'm afraid not . . . but the book as a whole does say something important about the best of the new speculative writers.

Many of the writers of the First Revolution of a generation ago, which gave science fiction its chance at maturity, were people who involved themselves with the real world only through their stories. Not all, by any means—and maybe never the best—but the "attic writers" made up a major element in the escapist science fiction of that generation, even though the escape was only to intellectual games with science and paper sociology.

The writers of the Second Revolution, whom Harlan Ellison invited to make his book, are people completely involved with their world. Call them "anti-hippies," if you like. Their imaginary worlds—even Ballard's—are projections of an ugly reality that make us squirm or help us understand ourselves and those around us. Note well that this number includes writers like del Rey, Sturgeon, Pohl, Anderson and others who have always been involved in their characteristic—and characteristically different—ways. Harlan wouldn't have invited them in otherwise.

"Dangerous Visions," then, does introduce the Second Revolution in speculative fiction . . . does illustrate what the new generation of writers are trying to do. Harlan's comments tie the knots. But too many of the stories are just time-markers that anyone could have written.

BAYCON '68

Unlike the committee for the 1967 World Science Fiction Convention in New York, the winners of the 1968 Convention in Oakland/Berkeley, California had a program well planned and information ready to mail as soon as they won out over San Francisco. If this department were not prepared so far in advance, you would have had the news sooner.

The Baycon will be held at the Hotel Claremont, Claremont and Ashby Avenues, Berkeley from Thursday night, August 29th

(opening cocktail party) through Monday, September 2nd. It will be combined with the 21st Annual Westercon, one of the country's most successful regionals. Philip José Farmer, one of the most original of still functioning SF writers, is Guest of Honor and banquet speaker. There are a lot of SF authors on the west coast now, and most of them will be there—including Anthony Boucher as a long-missed but unforgettable banquet toastmaster.

A $2.00 check to J. Ben Stark, Treasurer, BAYCON, P.O. Box 261, Fairmont Station, El Cerrito, California 94530 will bring you the Con's first Progress Report, with the tentative program and all other details. Others will follow regularly: this committee means business. You'll owe 'em another dollar if you attend. More bulletins from time to time.

THE MIDWESTCON

The country's two principal regional science-fiction conventions are the West Coast Westercon—combined this year with the World Convention in Berkeley—and the MidWestCon in Cincinnati, Ohio. This year's "convention without a program" will be held at the North Plaza Motel, 8911 Reading Road, Cincinnati on June 28th through 30th. There's generally a scheduled dinner, but no more formalities—it's purely social. For information, write Lou Tabakow, 3953 St. Johns Terrace, Cincinnati, Ohio 45236.

THE TENTH GALAXY READER

Edited by Frederik Pohl • Doubleday & Co., New York • 1967 • 232 pp. • $4.50

These *Galaxy* annuals and the numerous in-between anthologies of novelettes *et alia* have all been pretty good, and this one is a bit better than the norm for the series. Although the books are annuals, they are not collections made up from the magazine's preceding year: the eleven stories here range back to 1953 and come down to 1967. One is the Hugo-&-Nebula award-winning '"Repent, Harlequin!" Said the Ticktockman,' by Harlan Ellison. Another is the editor's previously anthologized "The Tunnel Under the World." The rest will be new if you didn't read them in *Galaxy*. They're written by an impressive panel of SF leaders.

Algis Budrys opens the book with "Wall of Crystal, Eye of Night." It's a strangely surrealistic story of big business in a nightmare future.

L. J. Stecher, Jr., with "An Elephant for the Prinkip," has an interstellar comedy with a nice technological framework and a blackout ending that most readers will anticipate. No matter; it's how it happens that matters.

Jim Harmon, in "The Place Where Chicago Was," gives us a 1983 in which the world has been conditioned against killing—against war—with nightmarish results.

Brian W. Aldiss' "Heresies of the Huge God," told nine hundred ten years after a monster from space lit briefly on Earth like a mantis on an apple, and changed it utterly, is a story that is more fantasy than science fiction.

Roger Zelazny, in "Devil Car," has a story about personalized automobiles that is nevertheless very convincing SF and demonstrates this new author's vast variety.

Damon Knight's "Auto-da-fe" is a kind of bitter rebuttal to Clifford Simak's eternal partnership of Dogs and Men in "City": his dogs are just as noble, but his last man is no damn good.

In "Door to Anywhere," Poul Anderson probes effectively into the mechanism and consequences of the matter-transmitting "gates" that have become a SF stereotype.

In "The Primitives," Frank Herbert has a wild future crime story with a beautiful built-in gimmick that is unfortunately purely untenable. Poul Anderson or Bob Silverberg would have known that Stone Age flintworkers didn't and don't chip flint in the same way that a gemcutter facets a diamond—especially an unnecessarily freakish Neanderthal woman.

And Richard Wilson, known for much comedy in SF form, creates two unfortunate humanoid robots who struggle to be human in "If You Were the Only—". Poor things, they *are* the only . . . and it hurts.

To repeat: it's the best *Galaxy* grab bag in quite a while.

THORNS

By Robert Silverberg • Ballantine Books, New York • No. U-6097 • 222 pp. • 75¢

It would appear that the success of Robert Silverberg's excellent series of factual books on archeology and other subjects has given him time and means to treat his science fiction more thoughtfully. This ambitious book is one result, and a disturbing one, in that it doesn't quite seem to make the point for which it is obviously striving. Or does it?

This is the story of—to quote the cover blurb—a non-man and an ultra-woman who are manipulated into becoming lovers and who manage to turn on their sadistic puppet-master and gain identities of their own. Minner Burris is a starman who has been converted by alien bioengineers into something that is no longer human physically and that may be inhuman mentally. He is a freak, a monster, a curiosity. Lona Kelvin is a nobody, a teen-age orphan used by human biologists as the experimental donor of some hundreds of thousands of ova, a hundred of which have survived *in vitro* or in foster-wombs so that Lona is the virgin mother of a hundred children she has never seen.

The puppet-master is the monstrously fat, sadistic Duncan Chalk, tycoon of Earth's entertainment empire, a telepath who picks up and

feeds on the emotions of the men and women he forces into crises. He is the monarch of the Middle Ages who kept his own stable of freaks for amusement . . . the British lordling of the Eighteenth Century who got his kicks by visiting Bedlam or ranging the streets of London in a pack of masked tormenters and killers.

The book, then, is the story of Chalk's plan to trick and force the two into love, then back into hate and despair . . . to take them out of loneliness, show them the beauty of the world, and convince them again that they have no part or place in it. It is certainly the blackest, sickest book that Robert Silverberg has ever attempted—or, at least, published—and it is the antithesis of the "Silverberg book" of which readers have complained rather hypocritically for years, the while they enjoyed the fast-moving, imaginative yarns immensely. Now that the author has undertaken the vastly difficult task of juggling serious science fiction and serious nonfiction with the same fluid ease and speed he used to reserve for cream puffs and bonbons, let us all hold our breaths and empath, or pray, or do whatever comes naturally.

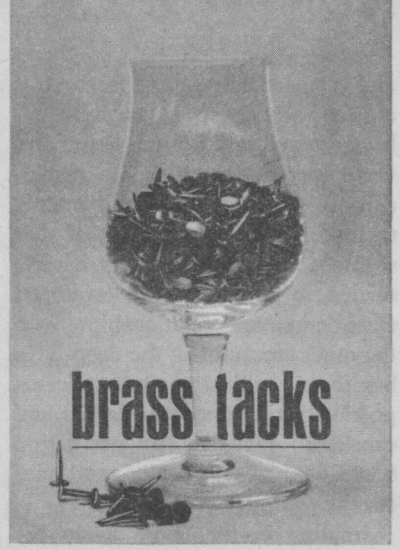
THE SPACE SWIMMERS

By Gordon Dickson • Berkley Books, New York • No. X-1371 • 160 pp. • 60¢

This is by all odds the strangest book Gordon Dickson has written, and it is certainly one of his best. It creates the concept of an intricately structured multi-dimensional universe, perceptible to some psionically gifted individuals and mainly to the evolving generations of that segment of mankind which has returned to the seas and developed close empathic relationships with the other creatures of the deep. (He has been exploring the undersea portion of the concept in earlier and excellent juvenile science-fiction books—among the really good ones for the younger age group.)

Implicit in the book, as in the "Dorsai" sequence the author is also developing, is the mechanism of alternate isolation and amalgamation as a basic force in evolving stronger, more potent races, individuals and societies. The Sea-People, ruthlessly hunted for generations by their kin on land, have been forced to isolate and perfect certain mental powers that the whole race needs . . . but they still need other experiences and attitudes that only the land can give their children. And both moieties of mankind must now meet the challenge of the strange, wonderful Swimmers that cruise the depths of space as effortlessly as dolphins and men cruise the sub-sea gardens.

But social forces and racial powers must operate through individuals, and so the pattern of the book works itself out in an intricate play of personalities. It should be an award contender.



Dear Editor:

I wish to compliment you on your excellent publication. I find the material presented always entertaining and often stimulating. I've been an avid reader of science fiction/science fact since the age of thirteen and I consider your magazine a leader in presenting the best material in both fields. I have also been interested in your editorials for some time, primarily because of your outspoken approach to basic issues and the avoidance of the trivia found in most periodicals. In fact it is in regard to your latest editorial, entitled "Democracy," that I address this letter to you.

In your editorial you successfully demonstrate that democracy—and I assume by your use of the word you mean rule by popular vote—is not a workable solution to the current Middle East situation. What is disturbing is your use of this point to advocate the establishment of dictatorial government in the Middle East or anywhere else as a solution to conflict. The fact is that the United States is not a democracy today and was not originally intended to be a democracy but rather a system emphasizing individual freedom where the government's only function is (was) to protect the individual's right to life. Since nobody who understands and advocates our system could logically advocate rule by the majority—at the expense of the minority—for this or any other country, why do you find it necessary to rehash this point and then try to attribute merit to the morally obscene concept of dictatorship?

Your only justification for this view is that the Arab people are "backward people" and that it would require "a driver" who would "force the people to give up what they really want." I notice, too, that the only alternative you offer is the destruction of the country of Israel to pacify the Arab bloc i.e. to sooth the savages at the expense of self-sufficient and worthwhile people. The basic fallacy here is that these people are unable to help themselves and that someone is morally obligated to force them to attain our level of civilization for their

own good. What would your reaction be if beings from another world arrived on Earth and forced us to conform to *their* way of doing things for the same motives you claim? What would happen to your self-respect, your ideals, and your personal goals? It is true that the consequence of being a savage, surrounded by others who are more sophisticated in their approach to reality, is self-destruction, but the same holds true for a savage on a leash.

It is characteristic of any system which preaches "the good of all" as opposed to "the good of the individual" as it's basic doctrine that its actions are backed by a gun. Witness Red China, the U.S.S.R., and their satellites who all claim to be friends of the masses, in their short histories they have slaughtered tens of millions of people whose only "sin" was wanting something for themselves. Before you propose any more "realistic" programs of this type I would rather see you fold your editorials and silently steal away.

JACK R. NOEL

3335 Kipling
Berkley, Michigan

If a truly superior culture took over Earth, I'd almost certainly hate, loathe and despise it. It would be terribly painful to us emotionally to be forced to surrender our philosophies, our goals, and our morals. It would feel horribly degrading.

That has nothing whatever to do with whether it would be good for us, in an absolute and real sense. A heroin addict considers drug withdrawal a hideous attack on his physical and emotional well-being. It's almost unimaginably painful to him.

The mere fact that something is painful has no predictable correlation with injury—whether it be physical pain or emotional pain.

The whole essence of my position expressed in the editorial on Democracy is that Majority Opinion is a perfect guide to what people want—but has no knowable correlation with what they need and would benefit from.

Dictatorship also has no knowable correlation with Good or Evil. It's long been recognized that a benevolent tyranny is the perfect government.

So—Democracy is not inherently a bit more ethical than dictatorship. It's just—by definition—more popular.

Dear Mr. Campbell:

Have you ever thought of publishing an index to Analog, Astounding Science Fiction, and Astounding Tales of Super Science?

An index bound in hard covers listing all stories, features, and editorials would eliminate the necessity of thumbing through shelves of back copies looking for a particular story by Chad Oliver, or an editorial on industrial pollution.

Of course I could sit down and start typing myself but I would much rather have an index in hard covers professionally done and I thought maybe enough others felt the same way to make it worthwhile.

ART LONG

Richmond, California

The M.I.T. Science Fiction Society has indexed—by both author and title—all the modern science-fiction magazines. They used one of the M.I.T. computers. The index is available from Erwin S. Strauss, 116 Broadway, Cambridge, Massachusetts 02142, or from your dealer. It sells for eight dollars.

Dear Mr. Campbell:

FitzPatrick's and Richmond's story: "There is a Tide" reached the newsstands within days of the successful heart-transplant in South Africa. This sharpens up a number of points, of which the first is the decreasing time-lag between science fiction and science fact, which you have constantly emphasized in Analog.

This story is the most recent of an extraordinary series (are there three or four, now?) at the topmost level of great science fiction —the level at which the "gimmick", itself interesting or exciting, is still completely subsidiary to much deeper considerations. In this series these include not only effects on the people involved, but far-reaching moral considerations.

The dilemma posed by the most recent story may in fact already be excruciatingly urgent. We don't need to worry *yet* about theft of healthy bodies into which viable brains can be transplanted. But how about hearts? It is now not only theoretically possible, but really practical, to replace a sick heart with a healthy one from an accident victim. There are lots of very powerful people with failing hearts. Powerful people can arrange accidents with relative ease. My blood runs cold.

The FitzPatrick and Richmond stories deserve a prominent place in every theological seminary and every university ethics department. The problems they pose are much more immediate than many that have aroused hot controversy in recent years, such as "life from test tubes," and even genetic tampering.

What chance that they will appear in book form soon?

DANIEL MORRIS

1202—8th Avenue W

Seattle, Washington 98119

That's no problem at all! Who needs to arrange an accident? Just look at the rate at which people —particularly young, vigorously healthy people—insist on killing themselves in automobiles! There's nowhere near that many people who could afford such operations.

Dear Mr. Campbell:

Mr. La Bonte's letter in the Jan-

uary issue touches on a problem which I have been kicking around for a while: BRAIN DRAIN.

Canada has it, as do most other countries in the free world. The heaviest drain is into the United States. Canada gets replacements from European countries and, lately, from East Asian sources.

But is this morally right? A developing country spends a large part of its income on education. A trained technician is a national sacrifice, and his loss is a disaster. No amount of external aid can give lasting benefits without trained people to administer it.

I would like to see a system set up which recognizes the prior claim of the originating country without preventing the individual's right of free choice.

Mr. La Bonte has left Panama for good. Unless he is extremely capable, the nineteen years he has lived there have taken from the economy with little or no return. His father was probably happy to provide for him, but if his father's money had been invested instead in the economy, and if the food and goods consumed by him had been available for export, Panama would have been helped materially.

I do not dispute Mr. La Bonte's right to leave. However, I do believe that the U.S.A. should compensate Panama if they intend to accept him.

Stated morally: Should a person or country benefit from another's inadequacy or loss? I am not allowed to take someone else's child, why should my country? The situation is parallel whether candy or a better position is used for bait. What do you say to a child who comes and asks, "May I live at your house 'cause your cooking is better than Mommy's?"

In essence the solution is simple. Each doner country would be credited with the value to the receiving country of her emigrants. The account could be drawn upon in two basic ways: a) by hiring a person from that country; or b) by educating in that country. No money would change hands at an international level.

I am not blind to the difficulties and drawbacks of the idea. I have devised some rules for operating the system, and would be happy to correspond on the subject with any interested party.

R. W. CUMMING
304-50 Oxton Avenue,
Toronto 7, Ontario, Canada

When a man takes a girl in marriage, is it morally right to take from her father the investment in that girl's life, training, feeding and education?

Yes, because a human being is not the possession of the family—or of the state. That, and no other, must be the basic ethical test applied.

The Greek god Vulcan, the armorer of the Olypians, was supposed to be lame. The-not-obvious-

to-us reason behind that was that most tribal armorers of that time were lame—because they had their heel tendons cut. That was done to keep them from running away from their tribe. Early effort to prevent the brain-drain of their technologists!

The answer to the brain-drain was quite clear from Mr. LaBonte's letter: Don't cut the valued technologist's heel tendon—don't try to imprison him—hold him by offering the things he has dedicated himself to. Offer him financial reward equivalent to that of the M.D., the Lawyer, and other highly trained men. Give him the laboratories and materials he needs to function, as the state supplies doctors with hospitals in which to exercise their skills.

The brain-drain to the U.S. and Canada is readily explained; we offer the technician the tools he needs to function.

Dear Mr. Campbell:

Hooray for "Star Trek"!!! Hooray for G. Harry Stine!!! And Hooray for you, John Campbell!!! At long last someone has satisfied a long-standing hope and an ardent desire for a knowledge of *true* facts and accurate details!

My most heartfelt thanks and warmest congratulations on an *outstanding* article. And please tell Harry Stine for me next time you see him, thank you; and you might even ask him why wasn't it longer?

By the way, didn't Harry Stine write "Galactic Gadgeteers"? You can tell him I enjoyed that, too (I just read it fairly recently while digging through my father's back issues of *Analog* and *Astounding*.)

DOROTHY SPEAR

119 Westgate
Wellesley Hills, Massachusetts

Analog's been around long enough to be a family tradition; I've heard from one young reader who's been working on his grandfather's collections.

Let's hope "Star Trek" stays around as long!

Dear Mr. Campbell:

I would like to cast a vote in favor of "Star Trek" as a show which does promote the idea of good science fiction.

I have been a science-fiction addict for the past eleven years. In fact, the first book I read after leaving the "See the ball. Spot sees the ball." stage was a juvenile science-fiction story. Since then, I've been totally hooked on science fiction.

I've always tried to interest my friends in reading science fiction. The boys were never hard to convince for they were all to some degree interested in it. But girls were always problems.

They said that either science fiction was too technical, or that it was too unbelievable and unrealistic, or that it was just plain garbage. Oh, some did read science fiction, but they were few and far between.

Then "Star Trek" came on television. I spoke of it at the lunch table at school and, surprisingly, found that some of my girl friends had seen it. In fact, some enjoyed what they saw. They weren't yet ready to admit that science fiction could be good, but they were approaching that point.

When I saw, later in the season, that Theodore Sturgeon had written an episode, I made the fact known. When they asked who he was, I told them.

One of them broke down and asked if she could read one of his books to see what I was talking about. I was at her house immediately with an armload of novels. She didn't read every single one of them, but she did like most of what she read.

Not everyone came dashing to me, begging for books. But, some did show a little interest in what I had to say concerning some novel or short story. This, in itself, was satisfying.

During this time, I read and reread "Dune," by Frank Herbert. I spoke of it and another girl said that she might be interested in reading it if it was so good. I lent her my copy. She was a little shocked by the length, but she did read it. Most important, she enjoyed it.

I'm not trying to say that since "Star Trek" came on TV, everyone who watches it becomes an immediate fan of science fiction. Some still consider it a rather stupid show. But it has helped to promote a little interest in science fiction.

The show is not perfect. Every episode is not the epitome of great science fiction. There are good episodes and bad ones, too. As a reader stated in a recent letter to you, the captain does take a rather active part in every incident. Yet, it must be taken into account that he is the star and, therefore, just can't sit on the bridge, giving orders for others to carry out.

Here at college, there are girls who have probably never really considered reading a science-fiction novel but do watch the show. They find it enjoyable and interesting. I know an English teacher who thinks a little better of science fiction after seeing a number of the better episodes. She may not consider science fiction a true literary form as of yet, but she no longer considers it as pure trash.

I am, of course, totally incapable of presenting enough conclusive statistical evidence which proves that "Star Trek" is promoting a rise in the general public's view of science fiction. But, all things being considered, I do feel that the show does help to bring to the public a glimpse of good science fiction. And this should be looked upon as doing a lot.

MARY LOU KUNDRAT
3650 California Avenue,
Pittsburgh, Pennsylvania 15212

I like "Star Trek" personally—but as an editor I'm even more delight-

ed. It's the first science-fiction show that represents genuine science fiction!

Dear John:

This is in regard to G. Harry Stine's pleasant article about our favorite space opera, may it long occupy prime viewing time, and receive a second commission for another trek when its tour of duty is complete!

But the present *U.S.S. Enterprise* is a slowpoke, not up to the task it has been assigned. It needs an overhaul, if not a redesign.

The speed of the *Enterprise* is expressed in "Warp Factors" which, we're told, is the speed of light times the third power of the warp factor. Thus Warp 8 means $8^3 = 512C$.

At Warp 8, the plates begin to buckle, the batteries sulfate, the seams breach, and the bilge begins to fill with space and all hands must man the oil-diffusion pumps. Clearly, Warp 8 is reserved for extreme emergency.

But running at Warp 8 for the entire five-year mission, without even slowing down for their weekly to-do on Friday night, would only put 2,560 light-years behind their drivers. This is not a piddling distance, but it is by no means great enough to require the firm assurance that the *Enterprise* has no intention of visiting other galaxies since there are plenty of planets in this one. At Warp 8, equal to 512 light-years per year, it is more than one lifetime from Sol to the galactic center.

Indeed, at Warp 8, one week's travel covers less than 10 light-years; and a safe and sane Warp 6 covers slightly more than 4, which is comparable to the separation between stars in this neck of the galaxy. This means that the density of planets populated with intelligent life is far higher than anyone hitherto believed possible, since Captain Kirk and his merry men manage to get involved with some form of life each week.

May I, therefore, suggest that someone in the engine room overhaul the *Enterprise* and equip it with a new warp factor? With no trace of hesitancy whatsoever, I proffer, "The Speed of Light, Squared," which was an innovation that did not innovate some twenty-five years ago, but which might be more acceptable in this enlightened day.

At C^2, things really got moving! You see all you would have to do is to divide the energy by the mass and you get C^2. Once you've got it, making use of it should be quite simple.

GEORGE O. SMITH

At C^2 you'd get nowhere, because C is one light-speed, and since $1^2 = 1$, $C^2 = C$, or only one light-speed. Or do you mean that $C = 3 \times 10''$ millimeters per sec., and C^2 therefore equals 300,000,000,000 the speed of light?

PROPHECY

continued from page 7

niques for switching such massive currents in fractional microseconds hadn't been invented.

Meanwhile the aeronautics people are establishing their own psychiatric ward. The drone was a Mach 2 design, with a simple ramjet engine, using a delta-wing configuration on a "Coke bottle" shape. The wings won't lift, and the ram jet won't start functioning below 500 miles per hour—and nothing on the planet in 1930 could approach that speed. It was normally launched either by a rocket booster of 30,000 pounds thrust, or from a supersonic bomber.

It's fairly obvious that the "engine" burned kerosine—there are adequate traces in the empty tanks. But supplying it with kerosine simply causes a spillage and a near-destructive fire—no engine action. Naturally. The "engine" is simply an open tube, constricted in the middle, with a ring of fuel jets. Careful examination shows no signs of any other equipment having been mounted in the "cowling" originally, and broken, or otherwise, moved out.

In other words, the standard operating technology of a relatively simple drone reconnaissance plane of 1968 *operates on physical principles which were totally unimagined in 1930.*

If I, in my early science-fiction writing days, had had a transtemporal fully detailed vision of that drone and its mechanisms, I would have been unable to describe it understandably, and certainly would have been unable to guess whether it was one hundred years or ten thousand years in the future.

But I would have been very sure it was no mere thirty-five years in advance!

The scientists of 1930 would have been so unable to analyze and understand the equipment, even when it was right in their hands, that they could have learned almost nothing from it. Suppose they did succeed in analyzing Teflon components as being $(CF_2)_n$; fine, only now what do they do with that information? Seeing a substance doesn't tell you how it was put together! And that silicone rubber, that works just fine at a temperature that makes the best high-temperature natural rubber start drooling out the cracks—how was *that* stuff produced? Sure, it's made of sand and natural gas. Only you don't just stir 'em together and get silicone rubber!

Inasmuch as the neutron, and induced radioactivity, weren't discovered until 1932, all those fission-product radioactives wouldn't help them guess at nuclear fission reactions.

From start to finish, they would be dealing with engineering devices based on unimagined physical principles, and on levels of technology they hadn't dreamed of.

And that, of course, shows how magnificently brilliant and all knowing we, now in 1968, are. *We* know all these things. *We* have reached the Ultimate Peak of Omniscience, and know *all* the physical principles ever to be found useful in the sweep of the Universe in Time and Space.

That's what makes prophecy so simple for the year 2000.

The year 2000 is just thirty-two years ahead of us—some six years less removed from us than 1930. Anybody who wants to bet that science—which has been advancing logarithmically, not merely linearly—won't make progress as massive in the coming thirty-two years as it quite clearly did in the past thirty-eight is out of his everlovin' mind.

Some items to ponder:

Again and again in science-fiction stories the visiting aliens have had their ship constructed "of an unknown metal, harder, tougher, and more corrosion resistant than anything known to Earth." Present indications are that the answer is—it ain't metal. It's a ceramic-fiber material.

One of the delightful weirdos one of my friends demonstrated to me is that the strongest, lightest, and, because of the immense cost of weight in space, the cheapest structural material, would be members made of diamond in a platinum-iridium matrix. Not because somebody loves expensive jewelry but because diamond is the hardest, stiffest, strongest material known to exist in the Universe, and the modern synthetic diamond forms a beautiful space-filling crystal shape; that is, the crystals nest with each other almost perfectly, leaving only about a three to four percent vacuity, to be filled by the Pt-Ir matrix. Despite the specific gravity of the Pt-Ir alloy being greater than 20, diamond is a very light material, and the average density is low. And the structural strength works out to a fantastically high value. Net result: A structural material so strong and so light that a diamond-and-platinum tube becomes cheaper than steel, aluminum or titanium!

Buckminster Fuller's geodesic dome designs are, gradually, being accepted as being in actuality what they "obviously" can't possibly be. They appear so fragile and bubble-like as to seem flimsy—but engineering experience has proven Fuller's original point. They are, by reason of their linked-tetrahedral design, fantastically rigid and rugged.

Fuller and his associates have gone further; working with boron fiber-epoxy matrix materials—fantastically stronger than steel, though still far weaker than the diamond-iridium—and geometrical principles of force analysis, they have

been able to design a structure weighing about as much as a five cent piece which is about four inches high, and can carry a compressive load of some 3,000 kilograms.

So . . .

Late in 1968, a prolonged and rising grumbling roar ends as a 15-foot drone subterrene surfaces in the middle of the test range at the U.S. Navy test grounds at Aberdeen. It carries markings vaguely resembling U.S. Navy insignia, somewhat worn after driving up through the underlying rock layers. It appears to be completely inert—but the nuclear physics lab presently reports that it's transmitting a code-modulated coherent beam of gamma radiation with a wavelength somewhere around 0.5 angstroms. The device shows a general radiation emission below background level—but *tritium* steam mixed with helium is oozing out one of the small vent ports. H^3 and He^3 are both present—but no neutrons are escaping.

It seems to be constructed of an unknown metal, harder, tougher, stronger, and more corrosion-resistant than anything known. Diamond drills polish it nicely, but wear out without progress. A hydrogen-fluorine blowtorch disintegrates a small hole, with some difficulty. Eventually, a ragged disk of the quarter-inch thick shell is cut out, mounted on a high-speed shaft, and used as a friction saw to cut off some samples for testing.

It's presently determined that it didn't disintegrate rock, or liquefy it—it simply pushed its way through. It's much harder, stiffer and stronger than any rock, and there is apparently a hydrogen fusion engine for power source.

When everything else failed, an effort was made to disassemble the engine by remote control (thirty-five miles) on Eniwetok. There was no explosion—some kind of safeties operated, and it simply went into slag-down, volatilizing most of its mass vigorously for half an hour.

How the power of the engine was

applied, however, is even less clear. There is a large block of something that appears to be cast granite, which reveals, under electron microscopy, at the limits of resolution, some very complex form of ordered array. No efforts to get the device to resume activity succeeded.

The material of the shell analyzes out to beryllium, boron, carbon and nitrogen; electron microscopy shows that the material is actually an ordered fibrous matrix, with the fibers forming interlocked and interpenetrative tetrahedral structures. Under loads of several million psi it will elongate as much as fifty percent and return with full elasticity. The concepts of Young's Modulus prove to be simply not applicable to this peculiar material.

In other words, we can properly predict that if a standard technological device of the year 2000 were presented to us—we wouldn't learn a darned thing. We don't know enough about the principles to be discovered to be able to analyze it—let alone duplicate it!

And this simply means that by the time the current college engineering students have had time to work up to senior engineer-executive level, basic principles we've never imagined will have been reduced to common engineering practice.

We haven't a prayer of predicting those unimagined principles—which will be the everyday shop practices then. We can't predict anything that stems from applying principles we've never imagined.

Anymore than I, back in 1930, could predict neutron-activation techniques for chemical identification, when neutrons hadn't been discovered. Or the sociological effects of transistor radios—and the consequent immense development of superior dry cells. I *might* have predicted radar; the principles of electromagnetic wave propagation were known at least in sufficient degree—but radar stems from a technological development following on improved understanding of electronic circuitry.

But predicting lasers? The principles hadn't been imagined. Sure, we could predict "atomic power"—but not nuclear fission, of course. Actually what we did predict then was hydrogen fusion—which we haven't cracked yet.

The trouble with Science, at any given time, is its ever-repeated conviction that "There's nothing really important—nothing basic—that we don't already understand."

Yet the span of one man's active lifetime in engineering science shows that to be completely false.

And a moment's consideration of "What will scientists of 1,000 years hence—100,000 years—be studying?" helps gain some perspective. Can anyone seriously hold that, in all that time, no one will find even a few fundamental principles we haven't already understood?

The Editor