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Fact and Science Fiction

stories

OCTOBER

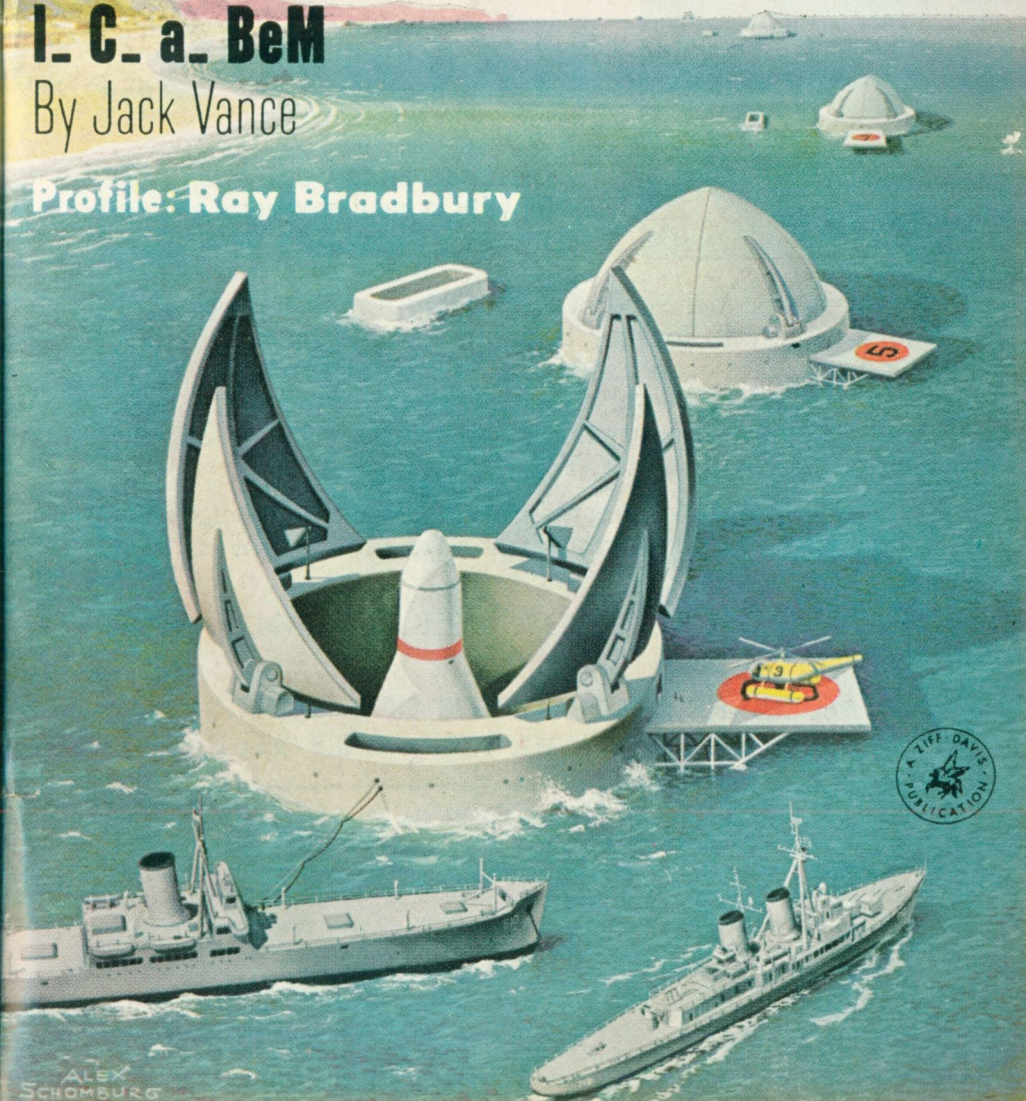
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Fact and Science Fiction Stories

OCTOBER, 1961

Vol. 35, No. 10

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EDITORIAL

THE dateline on this issue says October, you lucky readers have probably just come in from a brisk session with a rake and the falling leaves, and mayhap are now on your way to the football game. But at the moment these words are being written it is a stifling hot July day in New York, and the combined editorial brains around here are slowly sizzling in their enzymes.

That is all by way of saying that we are taking advantage of a combination of summer heat, vacation fever, and a pre-vacation cleaning out of the file cabinets, to fashion an editorial column of bits and pieces that have, in recent weeks, caught our fancy. And it is either speak now or forever hold our peace (or pieces).

* *

HERE'S one that is a hangover from that vastly exciting week when Capt. Alan Shepard rode his capsule through the sky

for the first time. A columnist, commenting on the flight a few days later, opined that if we *were* going to get into space, it would be a good idea to hold our atomic fire down here in earth until we were perfectly sure that "some air-borne ark" announced via telemetry signals its safe arrival—with male *and* female of the species—somewhere else in the inhabitable universe. That, in turn, made us think of Heinlein's "Universe" story and its many imitators—the great ark of a spaceship outward bound for centuries, and the people on board substituting fanciful theories and religious rituals for the original motivations of their argosy. And we wondered whether the people on an ark of the future, in saying their prayers, would eventually forget to say "The Lord is my Shepherd," and would—in ritualistic tribute to the dimly-remembered demi-god who first vaulted into space—intone instead, "The Shepard is my Lord."

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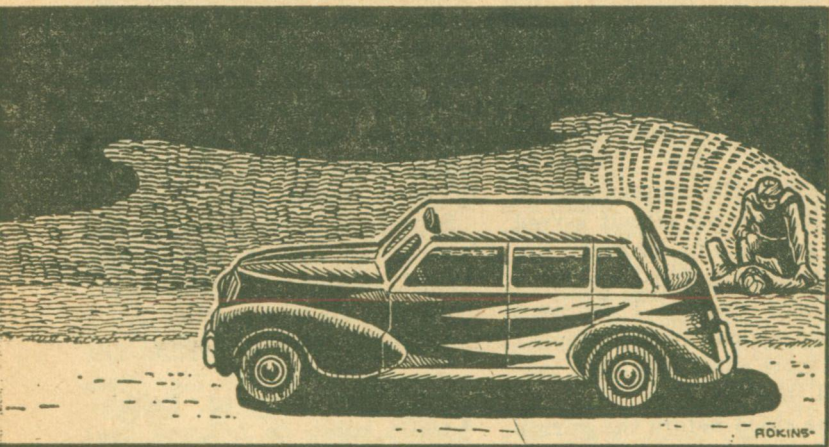


I-C-a-BeM

By
JACK VANCE

Why do we always think that the BEMs—the beings different from man, more powerful than man—will be aliens? Can we not look at ourselves, men augmented by science to be swift and deadly destroyers, and see a BEM? Here is a tale of intrigue, action, brilliant imagination, a tale as up-to-date as the headlines, a story that may leave you wondering what is actually going on in the world of power politics today.

ACROSS a period of seven months, James Keith had undergone a series of subtle and intricate surgeries, and his normally efficient body had been altered in many ways: "aug-



mented", to use the jargon of the Special Branch, CIA.

Looking into the mirror, he saw a face familiar only from the photographs he had studied—dark, feral and harsh: the face, literally, of a savage. His hair, which he had allowed to grow long, had been oiled, stranded with gold tinsel, braided and coiled; his teeth had been replaced with stainless-steel dentures; from his ears dangled a pair of ivory amulets. In each case, adornment was the secondary function. The tinsel strands in his head-dress were multi-laminated accumulators, their charge maintained by thermoelectric action. The dentures scrambled, condensed, transmitted, received, expanded and unscrambled radio waves of energies almost too low to be detected. The seeming ivory amulets were stereophonic radar units, which not only could guide Keith through the dark, but also provided a fractional second's warning of a bullet, an arrow, a bludgeon. His fingernails were copper-silver alloy, internally connected to the accumulators in his hair. Another circuit served as a ground, to protect him against electrocution—one of his own potent weapons. These were the more obvious augmentations; others more subtle had been fabricated into his flesh.

As he stood before the mirror

two silent technicians wound a narrow *darshba* turban around his head, draped him with a white robe. Keith no longer recognized the image in the mirror as himself. He turned to Carl Sebastiani, who had been watching from across the room—a small man, parchment-pale, with austere cheek-bones and a fragile look to his skull. Sebastiani's title, *Assistant to the Under Director*, understated his authority just as his air of delicacy misrepresented his inner toughness.

"Presently you'll become almost as much Tambi Ngasi as you are James Keith," said Sebastiani. "Quite possibly more. In which case your usefulness ends, and you'll be brought home."

Keith made no comment. He raised his arms, feeling the tension of new connections and conduits. He clenched his right fist, watched three metal stingers appear above his knuckles. He held up his left palm, felt the infra-red radiation emitted by Sebastiani's face. "I'm James Keith. I'll act Tamba Ngasi—but I'll never become him."

Sebastiani chuckled coolly. "A face is an almost irresistible symbol. In any event you'll have little time for introspection . . . Come along up to my office."

THE aides removed Keith's white robe; he followed Se-

bastiani to his official suite, three rooms as calm, cool and elegant as Sebastiani himself. Keith settled into a deep-cushioned chair, Sebastiani slipped behind his desk, where he flicked at a row of buttons. On a screen appeared a large-scale map of Africa. "A new phase seems to be opening up and we want to exploit it." He touched another button, and a small rectangle on the underpart of the great Mauretanian bulge glowed green. "There's Lakhadi. Fejo is that bright point of light by Tabacoundi Bay." He glanced sidelong at Keith. "You remember the floating ICBM silos?"

"Vaguely. They were news twenty years or so ago. I remember the launchings."

Sebastiani nodded. "In 1963. Quite a boondoggle. The ICBM's—Titans—were already obsolete, the silos expensive, maintenance a headache. A month ago they went for surplus to a Japanese salvage firm, warheads naturally not included. Last week Premier Adoui Shgawe of Lakhadi bought them, apparently without the advice, consent or approval of either Russians or Chinese."

Sebastiani keyed four new numbers; the screen flickered and blurred. "Still a new process," said Sebastiani critically. "Images recorded by the deposition of atoms on a light-sensitive

crystal. The camera is disguised, effectively if whimsically, as a common house-fly." A red and gold coruscation exploded upon the screen. "Impurities—rogue molecules, the engineers call them." The image steadied to reveal a high-domed council chamber, brightly lit by diffused sunlight. "The new architecture," said Sebastiani sardonically. "Equal parts of Zimbabwe, Dr. Caligari and the Bolshoi Ballet."

"It has a certain wild charm," said Keith.

"Fejo's the showplace of all Africa; no question but what it's a spectacular demonstration." Sebastiani touched a Hold button, freezing the scene in the council chamber. "Shgawe is at the head of the table, in gold and green. I'm sure you recognize him."

Keith nodded. Shgawe's big body and round muscular face had become almost as familiar as his own.

"To his right is Leonide Pashenko, the Russian ambassador. Opposite is the Chinese ambassador Hsia Lu-Minh. The others are aides." He set the image in motion. "We weren't able to record sound; the lip-reading lab gave us a rough translation . . . Shgawe is now announcing his purchase. He's bland and affable, but watching Pashenko and Hsia like a hawk. They're startled and annoyed, agreeing pos-

sibly for the first time in years . . . Pashenko inquires the need for such grandiose weapons . . . Shgawe replies that they were cheap and will contribute both to the defense and prestige of Lakhadi. Pashenko says that the U.S.S.R. has guaranteed Lakhadi's independence, that such concerns are superfluous. Hsia sits thinking. Pashenko is more volatile. He points out that the Titans are not only obsolete and unarmed, but that they require an extensive technical complex to support them.

"Shgawe laughs. 'I realize this and I hereby request this help from the U.S.S.R. If it is not forthcoming, I will make the same request of the Chinese People's Democracy. If still unsuccessful, I shall look elsewhere.'

"Pashenko and Hsia close up like clams. There's bad blood between them; neither trusts the other. Pashenko manages to announce that he'll consult his government, and that's all for today."

THE image faded. Sebastiani leaned back in his chair. In two days Tamba Ngasi leaves his constituency, Kotoba on the Dasa River, for the convening of the Grand Parliament at Fejo." He projected a detailed map on the screen, indicated Kotoba and Fejo with a dot of light. "He'll come down the Dasa River by

launch to Dasai, continue to Fejo by train. I suggest that you intercept him at Dasai. Tamba Ngasi is a Leopard Man, and took part in the Rhodesian Extermination. To win his seat in the Grand Parliament he killed his uncle, a brother, and four cousins. Extreme measures should cause you no compunction." With a fastidious fecture Sebastiani blanked out the screen. "The subsequent program we've discussed at length." He reached into a cabinet, brought forth a battered fiber case. "Here's your kit. You're familiar with all the contents except—these." He displayed three phials, containing respectively white, yellow and brown tablets. "Vitamins, according to the label." He regarded Keith owlshly. "We call them Unpopularity Pills. Don't dose yourself, unless you want to be unpopular."

"Interesting," said Keith. "How do they work?"

"They induce body odor of a most unpleasant nature. Not all peoples react identically to the same odor; there's a large degree of social training involved, hence the three colors." He chuckled at Keith's skeptical expression. "Don't underestimate these pills. Odors create a subconscious back-drop to our impressions; an offensive odor induces irritation, dislike, distrust. Notice the color of the pills: they indicate

the racial groups most strongly affected. White for Caucasians, yellow, for Chinese, brown for Negroes."

"I should think that a stench is a stench," said Keith.

Sebastiani pursed his lips didactically. "These naturally are not infallible formulations. North Chinese and South Chinese react differently, as do Laplanders, Frenchmen, Russians and Moroccans. American Negroes are culturally Caucasians. But I need say no more; I'm sure the function of the pills is clear to you. A dose persists two or three days, and the person affected is unaware of his condition." He replaced the phials in the case, and as if by afterthought brought forth a battered flashlight. "And this of course—absolutely top-secret. I marvel that you are allowed the use of it. When you press this button—a flashlight. Slip over the safety, press the button again—" he tossed the flashlight back into the case "—a death-ray. Or if you prefer, a laser, projecting red and infra-red at high intensity. If you try to open it you'll blow your arm off. Recharge by plugging into any AC socket. The era of the bullet is at an end." He snapped shut the case, rose to his feet, gave a brusque wave of his hand. "Wait in the outside office for Parrish; he'll take you to your plane. You

know your objectives. This is a desperate business, a fool-hardy business. You must like it or you'd have a job in the post office."

AT Latitude 6° 34" N, Longitude 13° 30" W, the plane made sunrise rendezvous with a wallowing black submarine. Keith drifted down on a jigger consisting of a seat, a small engine, four whirling blades. The submarine submerged with Keith aboard, surfaced twenty-three hours later to set him afloat in a sailing canoe, and once more submerged.

Keith was alone on the South Atlantic. Dawn ringed the horizon, and there to the east lay the dark mass of Africa. Keith trimmed his sail to the breeze and wake foamed up astern.

Daybreak illuminated a barren sandy coast, on which a few fishermen's huts could be seen. To the north, under wads of black-green foliage, the white buildings of Dasai gleamed. Keith drove his canoe up on the beach, plodded across sand dunes to the coast highway.

There was already considerable traffic abroad: women trudging beside donkeys, young men riding bicycles, an occasional small automobile of antique vintage, once an expensive new Amphitrite Air-Boat slid past on its air-cushion, with a soft whispered *whoosh*.

At nine o'clock, crossing the sluggish brown Dasa River, he entered Dasai, a small sun-dazzled coastal port, as yet untouched by the changes which had transformed Fejo. Two- and three-storied buildings of white stucco, with arcades below, lined the main street, and a strip planted with palms, rhododendrons and oleanders ran down the middle. There were two hotels, a bank, a garage, miscellaneous shops and office buildings. A dispirited police officer in a white helmet directed traffic: at the moment two camels led by a ragged Bedouin. A squat pedestal supported four large photographs of Adoui Shgawe, the "Beloved Premier of our Nation, the Great Beacon of Africa". Below, conspicuously smaller, were photographs of Marx, Lenin, and Mao Tse-Tung.

Keith turned into a side street, walked to the river-bank. He saw ramshackle docks, a half-dozen restaurants, beer-gardens and cabarets built over the water on platforms and shaded by palm-thatched roofs. He beckoned to a nearby boy, who approached cautiously. "When the launch comes down the river from Kotoba, where does it land?"

The boy pointed a thin crooked finger. "That is the dock, sir, just beyond the Hollywood Café."

"And when is the launch due to arrive?"

"That I do not know, sir."

Keith flipped the boy a coin and made his way to the dock, where he learned that indeed the river-boat from Kotoba would arrive definitely at two P.M., certainly no later than three, beyond any question of doubt by four.

Keith considered. If Tamba Ngasi should arrive at two or even three he would probably press on to Fejo, sixty miles down the coast. If the boat were late he might well decide to stay in Dasai for the night—there at the Grand Plaisir Hotel, only a few steps away.

The question: where to intercept Tamba Ngasi? Here in Dasai? At the Grand Plaisir Hotel? En route to Fejo?

NONE of these possibilities appealed to Keith. He returned to the main street. A tobacconist assured him that no automobiles could be hired except one of the town's three ancient taxicabs. He pointed up the street to an old black Citroen standing in the shade of an enormous sapodilla. The driver, a thin old man in white shorts, a faded blue shirt and canvas shoes, lounged beside a booth which sold crushed ice and syrup. The proprietress, a large woman in brilliant black, gold and orange gown prodded him with her fly-whisk, directing his attention to Keith. He moved reluctantly across the sidewalk.

"The gentleman wishes to be conveyed to a destination?"

Keith, in the role of the back-country barbarian, pulled at his long chin dubiously. "I will try your vehicle, provided you do not try to cheat me."

"The rates are definite," said the driver, unenthusiastically. "Three rupiahs for the first meter, one rupiah per meter thereafter. Where do you wish to go?"

Keith entered the cab. "Drive up the river road."

They rattled out of town, along a dirt road which kept generally to the banks of the river. The countryside was dusty and barren, grown over with thorn, with here and there a massive baobab. The miles passed and the driver became nervous. "Where does the gentleman intend to go?"

"Stop here," said Keith. The driver uncertainly slowed the cab. Keith brought money from the leather pouch at his belt. "I wish to drive the cab. Alone. You may wait for me under that tree." The driver protested vehemently. Keith pressed a hundred rupiahs upon him. "Do not argue; you have no choice. I may be gone several hours, but you shall have your cab back safely and another hundred rupiahs—if you wait here."

The driver alighted and limped through the dust to the shade of the tall yellow gum tree and Keith drove off up the road.

The country became more pleasant. Palm trees lined the riverbank; there were occasional garden-patches, and he passed three villages of round mud-wall huts with conical thatched roofs. Occasionally canoes moved across the dull brown water, and he saw a barge stacked with cord-wood, towed by what seemed a ridiculously inadequate row-boat with an outboard motor. He drove another ten miles and the country once more became inhospitable. The river, glazed by heat, wound between mud-banks where small crocodiles basked; the shores were choked with papyrus and larch thickets. Keith stopped the car, consulted a map. The first town of any consequence where the boat might be expected to discharge passengers, was Mbakouesse, another twenty-five miles—too far.

Replacing the map in his suitcase, Keith brought out a jar containing brilliantine, or so the label implied. He considered it a moment, and arrived at a plan of action.

HE now drove slowly and presently found a spot where the channel swung close in under the bank. Keith parked beside a towering clump of red-jointed bamboo and made his preparations. He wadded a few ounces of the waxy so-called brilliantine around a strangely heavy loz-

enge from a box of cough drops, taped the mass to a dry stick of wood. He found a spool of fine cord, tied a rock to the end, unwound twenty feet, tied on the stick. Then, wary of adders, crocodiles, and the enormous clicking-wing wasps which lived in burrows along the river-bank, he made his way through the larches to the shore of the river. Unreeling a hundred feet of cord, he flung stick and stone as far across the river as possible. The stone sank to the bottom, mooring the stick which now floated at the far edge of the channel, exactly where Keith had intended.

An hour passed, two hours. Keith sat in the shade of the larches, surrounded by the resinous odor of the leaves, the swampy reek of the river. At last: the throb of a heavy diesel engine. Down the river came a typical boat of the African rivers. About seventy feet long, with first-class cabins on the upper deck, second-class cubicles on the main deck, the remainder of the passengers sitting, standing, crouching or huddling wherever room offered itself.

The boat approached, chugging down the center of the channel. Keith gathered in the slack of the cord, drew the stick closer. On the top deck stood a tall gaunt man, his face dark, feral and clever under a *darshba* tur-

ban: Tamba Ngasi? Keith was uncertain. This man walked with head bent forward, elbows jutting at a sharp angle. Keith had studied photographs of Tamba Ngasi, but confronted by the living individual . . . There was no time for speculation. The boat was almost abreast, the bow battering up a transparent yellow bow-wave. Keith drew in the cord, pulled the stick under the bow. He held up the palm of his right hand, in which lay coiled a directional antenna. He spread his fingers, an impulse struck out to the detonator in the little black lozenge. A dull booming explosion, a gout of foam, sheets of brown water, shrill cries of surprise and fear. The boat nosed down into the water, swerved erratically.

Keith pulled back and rewound what remained of his cord.

The boat, already overloaded, was about to sink. It swung toward the shore, ran aground fifty yards down-stream.

Keith backed the taxi out of the larches, drove a half-mile up the road, waited, watching through binoculars.

A straggle of white-robed men and women came through the larches and presently a tall man in a *darshba* turban strode angrily out on the road. Keith focused the binoculars: there were the features he himself now wore. The posture, the stride seemed

more angular, more nervous; he must remember to duplicate these mannerisms . . . Now, to work. He pulled the hood of his cloak forward to conceal his face, shifted into gear. The taxi approached the knot of people standing by the roadside. A portly olive-skinned man in European whites sprang out, flagged him to a stop. Keith looked out in simulated surprise.

Keith shrugged. "I have a fare; I am going now to pick him up."

TAMBA Ngasi came striding up. He flung open the door. "The fare can wait. I am a government official. Take me to Dasaï."

The portly little Hindu made a motion as if he would likewise seek to enter the cab. Keith stopped him. "I have room only for one." Tamba Ngasi threw his suitcase into the cab, leapt in. Keith moved off, leaving the group staring disconsolately after him.

"An insane accident," Tamba Ngasi complained peevishly. "We ride along quietly; the boat strikes a rock; it seems like an explosion, and we sink! Can you imagine that? And I, an important member of the government, riding aboard! Why are you stopping?"

"I must see to my other fare." Keith turned off the road, along

a faint track leading into the scrub.

"No matter about your other fare, I wish no delay. Drive on."

"I must also pick up a can of petrol, otherwise we will run short."

"Petrol, here, out in the thorn bushes?"

"A cache known only to the taxi drivers." Keith halted, alighted, opened the rear door. "Tamba Ngasi, come forth."

Tamba Ngasi stared under Keith's hood into his own face. He spit out a passionate expletive, clawed for the dagger at his waist. Keith lunged, tapped him on the forehead with his copper-silver fingernails. Electricity burst in a killing gush through Ngasi's brain; he staggered side-long and fell into the road.

Keith dragged the corpse off the track, out into the scrub. Tamba Ngasi's legs were heavy and thick, out of proportion to his sinewy torso. This was a peculiarity of which Keith had been ignorant. But no matter; who would ever know that Keith's shanks were long and lean?

Jackals and vultures would speedily dispose of the corpse.

Keith transferred the contents of the pouch to his own, sought but found no money-belt. He returned to the taxi, drove back to the tall gum tree. The driver lay asleep; Keith woke him with a blast of the horn. "Hurry now,

take me back to Dasai, I must be in Fejo before nightfall."

IN ALL of Africa, ancient, medieval and modern, there never had been a city like Fejo. It rose on a barren headland north of Tabacounda Bay, where twenty years before not even fishermen had deigned to live. Fejo was a bold city, startling in its shapes, textures and colors. Africans determined to express their unique African heritage had planned the city, rejecting absolutely the architectural traditions of Europe and America, both classical and contemporary. Construction had been financed by a gigantic loan from the U.S.S.R., Soviet engineers had translated the sketches of fervent Lakhadi students into space and solidity.

Fejo, therefore, was a remarkable city. Certain European critics dismissed it as a stage-setting; some were fascinated, others repelled. No one denied that Fejo was compellingly dramatic. "In contrast to the impact of Fejo, Brasilia seems sterile, eclectic, prettified," wrote an English critic. "Insane fantasies, at which Gaudi himself might be appalled," snapped a Spaniard. "Fejo is the defiant challenge of African genius, and its excesses are those of passion, rather than of style," declared an Italian. "Fejo," wrote a Frenchman, "is

hideous, startling, convoluted, pretentious, ignorant, oppressive, and noteworthy only for the tortured forms to which good building material has been put."

Fejo centered on the fifty-story spire of the Institute of Africa. Nearby stood the Grand Parliament, held aloft on copper arches, with oval windows and a blue-enameled roof like a broadbrimmed derby hat. Six tall warriors of polished basalt, representing the six principal tribes of Lakhadi fronted a plaza and beyond, the Hotel des Tropiques, the most magnificent in Africa, and ranking with any in the world. The Hotel des Tropiques was perhaps the most conventional building of the central complex, but even here the architects had insisted on pure African style. Vegetation from the roof-garden trailed down the white and blue walls; the lobby was furnished in *padauk*, teak and ebony; columns of structural glass rose from silver-blue carpets and purple-red rugs to support a ceiling of stainless steel and black enamel.

At the far end of the plaza stood the official palace, and beyond, the first three of a projected dozen apartment buildings, intended for the use of high officials. Of all the buildings in Fejo, these had been most favorably received by foreign critics, possibly because of their

simplicity. Each floor consisted of a separate disk twelve feet in height, and was supported completely apart from the floors above and below by four stanchions piercing the disks. Each disk also served as a wide airy deck, and the top deck functioned as a heliport.

ON the other side of the Hotel des Tropiques spread another plaza, to satisfy the African need for a bazaar. Here were booths, hawkers, and entertainers of every sort, selling autochron wrist-watches powered and synchronized by 60-cycle pulse originating in Greenwich, as well as jujus, elixirs, potions and talismans.

Through the plaza moved a cheerful and volatile mixture of people: negro women in magnificently printed cottons, silks and gauzes, Mohammedans in white *djellabas*, Tuaregs and Mauritanian Blue Men, Chinese in fusty black suits, ubiquitous Hindu shopkeepers, an occasional Russian grim and aloof from the crowd. Beyond this plaza lay a district of stark white three-story apartment cubicles. The people looking from the windows seemed irresolute and uncertain, as if the shift from mud and thatch to glass, tile, and air-conditioning were too great to be encompassed in a lifetime.

Into Fejo, at five in the after-

noon, came James Keith, riding first class on the train from Dasaï. From the terminal he marched across the bazaar to the Hotel des Tropiques, strode to the desk, brushed aside a number of persons who stood waiting, pounded his fist to attract the clerk, a pale Eurasian who looked around in annoyance. "Quick!" snapped Keith, "Is it fitting that a Parliamentary waits at the pleasure of such as you? Conduct me to my suite."

The clerk's manner altered. "Your name, sir?"

"I am Tamba Ngasi."

"There is no reservation, Comrade Ngasi. Did you—"

Keith fixed the man with a glare of outrage. "I am a Parliamentary of the State. I need no reservation."

"But all the suites are occupied!"

"Turn someone out, and quickly."

"Yes, Comrade Ngasi. At once."

Keith found himself in a sumptuous set of rooms furnished in carved woods, green glass, heavy rugs. He had not eaten since early morning; a touch on a button flashed the restaurant menu on a screen. No reason why a tribal chieftain should not enjoy European cuisine, thought Keith, and he ordered accordingly. Awaiting his lunch he inspected walls, floor,

drapes, ceiling, furniture. Spy cells might or might not be standard equipment here in intrigue-ridden Fejo. They were not apparent, nor did he expect them to be. The best of modern equipment was dependably undetectable.

He stepped out on the deck, pushed with his tongue against one of his teeth, spoke in a whisper for several minutes. He returned the switch to its former position, and his message was broadcast in a hundredth-second coded burst indistinguishable from static. A thousand miles overhead hung a satellite, rotating with the Earth; it caught the signal, amplified and rebroadcast it to Washington.

Keith waited, and minutes passed, as many as were required to play back his message, and frame a reply. Then came the almost imperceptible click marking the arrival of the return message. It communicated itself in the voice of Sebastiani by way of Keith's jaw-bone to his auditory nerve, soundlessly, but with all of Sebastiani's characteristic inflections.

"So far so good," said Sebastiani. "But I've got some bad news. Don't try to make contact with Corty. Apparently he's been apprehended and brain-washed by the Chinese. So you're on your own."

KEITH grunted glumly, re-turned to the sitting room. His lunch was served; he ate, then he opened the case he had taken from Tamba Ngasi. It was similar to his own, even to the contents: clean linen, toilet articles, personal effects, a file of documents. The documents, printed in florid New African type, were of no particular interest: a poll list, various official notifications. Keith found a directive which read, "... When you arrive in Fejo, you will take up lodgings at Rue Arsabatte 453, where a suitable suite has been prepared for you. Please announce your presence to the Chief Clerk of Parliament as soon as possible."

Keith smiled faintly. He would simply declare that he preferred the Hotel des Tropiques. And who would question the whim of a notoriously ill-tempered back-country chieftain?

Replacing the contents of Tamba Ngasi's suitcase, Keith became aware of something peculiar. The objects felt—strange. This fetish-box for instance—just a half-ounce too heavy. Keith's mind raced along a whole network of speculations. This rather battered ball-point pencil . . . He inspected it closely, pointed it away from himself, pressed the extensor-button. A click, a hiss, a spit of cloudy gas. Keith jerked back, moved across

the room. It was a miniature gas-gun, designed to puff a drug into and through the pores of the skin. Confirmation for his suspicions—and in what a strange direction they led!

Keith replaced the pencil, closed the suitcase. He paced thoughtfully back and forth a moment or two, then locked his own suitcase and left the room.

He rode down to the lobby on a twinkling escalator of pink and green crystal, stood for a moment surveying the scene. He had expected nothing so splendid; how, he wondered, would Tamba Ngasi have regarded this glittering room and its hyper-sophisticated guests? Not with approval, Keith decided. He walked to the entrance, twisting his face into a leer of disgust. Even by his own tastes, the Hotel des Tropiques seemed over-rich, a trifle too fanciful.

He crossed the plaza, marched along the Avenue of the Six Black Warriors to the grotesque but oddly impressive Grand Parliament of Lakhadi. A pair of glossy black guards, wearing metal sandals and greaves, pleated kirtles of white leather, sprang out, crossed spears in front of him.

Keith inspected them haughtily. "I am Tamba Ngasi, Grand Parliamentarian from Kotoba Province."

The guards twitched not a

muscle; they might have been carved of ebony. From a side cubicle came a short fat white man in limp brown slacks and shirt. He barked, "Tamba Ngasi. Guards, *admit!*"

The guards with a single movement sprang back across the floor. The little fat man bowed politely, but it seemed as if his gaze never veered from Keith. "You have come to register, Sir Parliamentarian?"

"Precisely. With the Chief Clerk."

The fat man bowed his head again. "I am Vasif Doutoufsky, Chief Clerk. Will you step into my office?"

DOUTOUFSKY'S office was hot and stuffy and smelled sweet of rose incense. Doutoufsky offered Keith a cup of tea. Keith gave Tamba Ngasi's characteristic brusque shake, Doutoufsky appeared faintly surprised. He spoke in Russian. "Why did you not go to Rue Arsatbatte? I awaited you there until ten minutes ago."

Keith's mind spun as if on ball-bearings. He said gruffly, in his own not-too-facile Russian. "I had my reasons . . . There was an accident to the riverboat, possibly an explosion. I hailed a taxi, and so arrived at Dasai."

"Aha," said Doutoufsky in a soft voice. "Do you suspect interference?"

"If so," said Keith, "it could only come from one source."

"Aha," said Doutoufsky again, even more softly. "You mean—" "The Chinese."

Doutoufsky regarded Keith thoughtfully. "The transformation has been done well," he said. "Your skin is precisely correct, with convincing tones and shadings. You speak rather oddly."

"As might you, if your head were crammed with as much as mine."

Doutoufsky pursed his lips, as if at a secret joke. "You will change to Rue Arsabatte?"

Keith hesitated, trying to sense Doutoufsky's relationship to himself: inferior or superior? Inferior, probably, with the powers and prerogatives of the contact, from whom came instructions and from whom, back to the Kremlin, went evaluations. A chilling thought: Doutoufsky and he who had walked in the guise of Tamba Ngasi might both be renegade Russians, both Chinese agents in this most fantastic of all wars. In which case Keith's life was even more precarious than it had been a half-hour previous . . . But this was the hypothesis of smaller probability. Keith said in a voice of authority, "An automobile has been placed at my disposal?"

Doutoufsky blinked. "To my knowledge, no."

"I will require an automobile,"

said Keith. "Where is your car?"

"Surely, sir, this is not in character?"

"I am to be the judge of that."

Doutoufsky heaved a sigh. "I will call out one of the Parliamentary limousines."

"Which, no doubt, is efficiently monitored."

"Naturally."

"I prefer a vehicle in which I can transact such business as necessary without fear of witnesses."

Doutoufsky nodded abruptly. "Very well." He tossed a key to the table of his desk. "This is my own Aerofloat. Please use it discreetly."

"This car is not monitored?"

"Definitely not."

"I will check it intensively nonetheless." Keith spoke in a tone of quiet menace. "I hope to find it as you describe."

Doutoufsky blinked, and in a subdued voice explained where the car might be found. "Tomorrow at noon Parliament convenes. You are naturally aware of this."

"Naturally. Are there supplementary instructions?"

Doutoufsky gave Keith a dry side-glance. "I was wondering when you would ask for them, since this was specified as the sole occasion for our contact. Not to hector, not to demand pleasure-cars."

"Contain your arrogance, Va-

sif Doutoufsky. I must work without interference. Certain slight doubts regarding your ability already exist; spare me the necessity of corroborating them."

"Aha," said Doutoufsky softly. He reached in his drawer, tossed a small iron nail down upon the desk. "Here are your instructions. You have the key to my car, you have refused to use your designated lodgings. Do you require anything further?"

"Yes," said Keith, grinning wolfishly. "Funds."

Doutoufsky tossed a packet of *rupiah* notes on the desk. "This should suffice until our next contact."

Keith rose slowly to his feet. There would be difficulties if he failed to make prearranged contacts with Doutoufsky. "Certain circumstances may make it necessary to change the routine."

"Indeed? Such as?"

"I have learned—from a source which I am not authorized to reveal—that the Chinese have apprehended and brain-washed an agent of the West. He was detected by the periodicity of his actions. It is better to make no precise plans."

Doutoufsky nodded soberly. "There is something in what you say."

BY moonlight the coast road from Fejo to Dasai was

beautiful beyond imagination. To the left spread an endless expanse of sea, surf and wan desolate sand; to the right grew thorn-bush, baobabs, wire cactus—angular patterns in every tone of silver, gray and black.

Keith felt reasonably sure that he had not been followed. He had carefully washed the car with the radiation from his flashlight, to destroy a spy-cell's delicate circuits by the induced currents. Halfway to Dasai he braked to a halt, extinguished his lights, searched the sky with the radar in his ear-amulets. He could detect nothing; the air was clear and desolate, nor did he sense any car behind him. He took occasion to despatch a message to the hovering satellite. There was a five minute wait; then the relay clicked home. Sebastiani's voice came clear and distinct into his brain: "The coincidence, upon consideration, is not astonishing. The Russians selected Tamba Ngasi for the same reasons we did: his reputation for aggressiveness and independence, his presumable popularity with the military, as opposed to their suspicion of Shgawe.

"As to the Arsabatte address, I feel you have made the correct decision. You'll be less exposed at the hotel. We have nothing definite on Doutoufsky. He is ostensibly a Polish emigrant, now a Lakhadi citizen. You may have

overplayed your hand taking so strong an attitude. If he seeks you out, show a degree of contrition and remark that you have been instructed to cooperate more closely with him."

Keith searched the sky once more, but received only a signal from a low-flying owl. Confidently he continued along the unreal road, and presently arrived at Dasai.

The town was quiet, with only a sprinkling of street-lights, a tinkle of music and laughter from the cabarets. Keith turned along the river-road and proceeded inland.

The country became wild and forlorn. Twenty miles passed; Keith drove slowly. Here, the yellow gum tree where he had discharged the taxi-driver. Here, where he had grounded the river-boat. He swung around, returned down the road. Here—where he had driven off the road with the man he had thought to be Tamba Ngasi. He turned, drove a space, then stopped, got out of the car. Off in the brush a dozen yellow eyes reflected back his headlights, then swiftly retreated.

THE jackals had been busy with the body. Three of them lay dead, mounds of rancid fur, and Keith was at a loss to account for their condition. He played his flashlight up and down the corpse, inspected the

flesh at which the jackals had been tearing. He bent closer, frowning in puzzlement. A peculiar pad of specialized tissue lay along the outside of the thighs, almost an inch thick. It was organized in orderly strips and fed plentifully from large arteries, and here and there Keith detected the glint of metal. Suddenly he guessed the nature of the tissue and knew why the jackals lay dead. He straightened up, looked around through the moon-drenched forest of cactus and thorn-scrub and shivered. The presence of death alone was awesome, the more so for the kind of man who lay here so far from his home, so strangely altered and augmented. Those pads of gray flesh must be electro-organic tissue, similar to that of the electric eel, somehow adapted to human flesh by Russian biologists. Keith felt a sense of oppression. How far they exceed us! he thought. My power source is chemical, inorganic; that of this man was controlled by the functioning of his body, and remained at so high a potential that three jackals had been electrocuted tearing into it.

Gritting his teeth he bent over the corpse, and set about his examination.

Half an hour later he had finished, and stood erect with two films of semi-metalloid peeled from the inside of the corpse's

cheeks: communication circuits certainly as sophisticated as his own.

He scrubbed his hands in the sand, returned to the car and drove back into the setting moon. He came to the dark town of Dasai, turned south along the coast road, and an hour later returned to Fejo.

The lobby of the Hotel des Tropiques was now illuminated only by great pale green and blue globes. A few groups sat talking and sipping drinks; to the hushed mutter of their conversation Keith crossed to the escalator, was conveyed to his room.

He entered with caution. Everything seemed in order. The two cases had not been tampered with; the bed had been turned back, pajamas of purple silk had been provided for him.

Before he slept, Keith touched another switch in his dentures, and the radar mounted guard. Any movement within the room would awaken. He was temporarily secure; he slept.

AN hour before the first session of the Grand Parliament Keith sought out Vasif Doutoufsky, who compressed his mouth into a pink rosette. "Please. It is not suitable that we seem intimate acquaintances."

Keith grinned his vulpine unpleasant grin. "No fear of that." He displayed the devices he had

taken from the body of the so-called Tamba Ngasi. Doutoufsky peered curiously.

"These are communication circuits." Keith tossed them to the desk. "They have failed, and I cannot submit my reports. You must do this for me, and relay my instructions."

Doutoufsky shook his head. "This was not to be my function. I cannot compromise myself; the Chinese already suspect my reports."

Ha, thought Keith, Doutoufsky functioned as a double-agent. The Russians seemed to trust him, which Keith considered somewhat naive. He ruminated a moment, then reaching in his pouch brought forth a flat tin. He opened it, extracted a small woody object resembling a clove. He dropped it in front of Doutoufsky. "Eat this."

Doutoufsky looked up slowly, brow wrinkled in plaintive protest. "You are acting very strangely. Of course I shall not eat this object. What is it?"

"It is a tie which binds our lives together," said Keith. "If I am killed, one of my organs broadcasts a pulse which will detonate this object."

"You are mad," muttered Doutoufsky. "I shall make a report to this effect."

Keith moved forward, laid his hand on Doutoufsky's shoulder, touched his neck. "Are you aware



that I can cause your heart to stop?" He sent a trickle of electricity into his copper-silver fingernails.

Doutoufsky seemed more puzzled than alarmed. Keith emitted a stronger current, enough to make any man wince. Doutoufsky merely reached up to disengage Keith's arm. His fingers clamped on Keith's wrist. They were cold, and clamped like steel tongs. And into Keith's arm came a hurting surge of current.

"You are an idiot," said Doutoufsky in disgust. "I carry weapons you know nothing about. Leave me at once, or you will regret it."

Keith departed, sick with dismay. Doutoufsky was augmented. His rotundity no doubt concealed great slabs of electro-generative tissue. He had blundered; he had made a fool of himself.

A GONG rang; other Parliamentarians filed past him. Keith took a deep breath, swaggered into the echoing red, gold, and black paneled hall. A doorkeeper saluted. "Name, sir?"

"Tamba Ngasi, Kotoba Province."

"Your seat, Excellency, is Number 27."

Keith seated himself, listened without interest to the invocation. What to do about Doutoufsky?

His ruminations were interrupted by the appearance on the rostrum of a heavy moon-faced man in a simple white robe. His skin was almost blue-black, the eyelids hung lazily across his protuberant eyeballs, his mouth was wide and heavy. Keith recognized Adoui Shgawe, Premier of Lakhadi, Benefactor of Africa.

He spoke resonantly, in generalities and platitudes, with many references to Socialist Solidarity. "The future of Lakhadi is the future of Black Africa! As we look through this magnificent chamber and note the colors of the tasteful decoration, can we not fail to be impressed by the correctness of the symbolism? Red is the color of blood, which is the same for all men, and also the color of International Socialism. Black is the color of our skins, and it is our prideful duty to ensure that the energy and genius of our race is respected around the globe. Gold is the color of success, of glory, and of progress; and golden is the future of Lakhadi!"

The chamber reverberated with applause.

Shgawe turned to more immediate problems. "While spiritually rich, we are in certain ways impoverished. Comrade Nambey Faranah—" he nodded toward a squat square-faced man in a black suit "—has presented an interesting program. He sug-

gests that a carefully scheduled program of immigration might provide us a valuable new national asset. On the other hand —"

Comrade Nambey Faranah bounded to his feet and turned to face the assembly. Shgawe held up a restraining hand, but Faranah ignored him. "I have conferred with Ambassador Hsia Lu-Minh of our comrade nation, the Chinese People's Democracy. He has made the most valuable assurances, and will use all his influence to help us. He agrees that a certain number of skilled agricultural technicians can immeasurably benefit our people, and can accelerate the political orientation of the non-political back-regions. Forward to progress!" bellowed Faranah. "Hail the mighty advance of the colored races, arm in arm, united under the red banner of International Socialism!" He looked expectantly around the hall for applause, which came only in a perfunctory spatter. He sat down abruptly. Keith studied him with a new somber speculation. Comrade Faranah—an augmented Chinese?

Adoui Shgawe had placidly continued his address. "—some have questioned the practicality of this move," he was saying. "Friends and comrades, I assure you that no matter how loyal and comradely our brother nations,

they cannot provide us prestige! The more we rely on them for leadership, the more we diminish our own stature among the nations of Africa."

Nambey Faranah held up a quivering finger. "Not completely correct, Comrade Shgawe!"

Shgawe ignored him. "For this reason I have purchased eighteen American weapons. Admittedly they are cumbersome and outmoded. But they are still terrible instruments—and they command respect. With eighteen intercontinental missiles poised against any attack, we consolidate our position as the leaders of black Africa."

There was another spatter of applause. Adoui Shgawe leaned forward, gazed blandly over the assembly. "That concludes my address. I will answer questions from the floor. . . . Ah, Comrade Bouassede."

COMRADE Bouassede, a fragile old man with a fine fluffy white beard, rose to his feet. "All very fine, these great weapons, but against whom do we wish to use them? What good are they to us, who know nothing of such things?"

Shgawe nodded with vast benevolence. "A wise question, Comrade. I can only answer that one never knows from which direction some insane militarism may strike."

Faranah leapt to his feet. "May I answer the question, Comrade Shgawe?"

"The assembly will listen to your opinions with respect," Shgawe declared courteously.

Faranah turned toward old Bouassede. "The imperialists are at bay, they cower in their rotting strongholds, but still they can muster strength for one final feverish lunge, should they see a chance to profit."

Shgawe said, "Comrade Faranah has expressed himself with his customary untiring zeal."

"Are not these devices completely beyond our capacity to maintain?" demanded Bouassede.

Shgawe nodded. "We live in a swiftly changing environment. At the moment this is the case. But until we are able to act for ourselves, our Russian allies have offered many valuable services. They will bring great suction dredges, and will station the launching tubes in the tidal sands off our coast. They have also undertaken to provide us a specially designed ship to supply liquid oxygen and fuel."

"This is all nonsense," growled Bouassede. "We must pay for this ship; it is not a gift. The money could be better spent building roads and buying cattle."

"Comrade Bouassede has not considered the intangible factors

involved," declared Shgawe equally. "Ah, Comrade Maguemi. Your question, please."

Comrade Maguemi was a serious bespectacled young man in a black suit. "Exactly how many Chinese immigrants are envisioned?"

Shgawe looked from the corner of his eye toward Faranah. "The proposal so far is purely theoretical, and probably—"

Faranah jumped to his feet. "It is a program of great urgency. However many Chinese are needed, we shall welcome them."

"This does not answer my question," Maguemi persisted coldly. "A hundred actual technicians might in fact be useful. A hundred thousand peasants, a colony of aliens in our midst, could only bring us harm."

Shgawe nodded gravely. "Comrade Maguemi has illuminated a very serious difficulty."

"By no means," cried Faranah. "Comrade Maguemi's premises are incorrect. A hundred, a hundred thousand, a million, ten million—what is the difference? We are Communists together, striving toward a common goal!"

"I do not agree," shouted Maguemi. "We must avoid doctrinaire solutions to our problems. If we are submerged in the Asiatic tide, our voices will be drowned."

Another young man, thin as a starved bird, with a thin face and

blade-like nose, sprang up. "Comrade Maguemi has no sense of historical projection. He ignores the teachings of Marx, Lenin, and Mao. A true Communist takes no heed of race or geography."

"I am no true Communist," declared Maguemi coldly. "I have never made such a humiliating admission. I consider the teachings of Marx, Lenin and Mao even more obsolete than the American weapons with which Comrade Shgawe has unwisely burdened us."

Adoui Shgawe smiled broadly. "We may safely pass on from the subject of Chinese immigration, as in all likelihood it will never occur. A few hundred technicians, as Comrade Maguemi suggests, of course will be welcome. A more extended program would certainly lead to difficulties."

Nambey Faranah glowered at the floor.

Shgawe spoke on, in a soothing voice, and presently adjourned the Parliament for two days.

Keith returned to his room at the des Tropiques, settled himself on the couch, considered his position. He could feel no satisfaction in his performance to date. He had blundered seriously with Doutoufsky, might well have aroused his suspicions. There was certainly small reason for optimism.

TWO days later Adoui Shgawe reappeared in the Grand Chamber, to speak on a routine matter connected with the state-operated cannery. Nambey Faranah could not resist a sardonic jibe: "At last we perceive a use for the cast-off American missile-docks: they can easily be converted into fish-processing plants, and we can shoot the wastes into space."

Shgawe held up his hands against the mutter of appreciative laughter. "This is no more than stupidity; I have explained the importance of these weapons. Persons inexperienced in such matters should not criticize them."

Faranah was not to be subdued so easily. "How can we be anything other than inexperienced? We know nothing of these American cast-offs, they float unseen in the ocean. Do they even exist?"

Shgawe shook his head in pitying disgust. "Are there no extremes to which you will not go? The docks are at hand for any and all to inspect. Tomorrow I will order the *Lumumba* out, and I now request the entire membership to make a trip of inspection. There will be no further excuse for skepticism—if, indeed, there is now."

Faranah was silenced. He gave a petulant shrug, settled back into his seat.

Almost two-thirds of the chamber responded to Shgawe's invitation, and on the following morning, trooped aboard the single warship of the Lakhadi navy, an ancient French destroyer. Bells clanged, whistles sounded, water churned up aft and the *Lumumba* eased out of Tabacoundi Bay, to swing south over long blue swells.

Twenty miles the destroyer cruised, paralleling the wind-beaten shore; then at the horizon appeared seventeen pale humps—the floating missile silos. But the *Lumumba* veered in toward shore, where the eighteenth of the docks had been raised on buoyancy tanks, floated in toward the beach, lowered to the sub-tidal sand. Alongside was moored a Russian dredge which pumped jets of water below the silo, dislodging sand and allowing the dock to settle.

The Parliamentarians stood on the *Lumumba's* foredeck, staring at the admittedly impressive cylinder. All were forced to agree that the docks existed. Premier Shgawe came out on the wing of the bridge, with beside him the Grand Marshal of the Army, Achille Hashembe, a hard-bitten man of sixty, with close-cropped gray hair. While Shgawe addressed the Parliamentarians Hashembe scrutinized them carefully, first one face, then another.

THE helicopter assigned to this particular dock is under repair," said Shgawe. "It will be inconvenient to inspect the missile itself. But no matter; our imaginations will serve us. Picture eighteen of these great weapons ranged at intervals along the shores of our fatherland; can a more impressive defense be conceived?"

Keith, standing near Faranah heard him mutter to those near at hand. Keith watched with great attention. Two hours previously, stewards had served small cups of black coffee, and Keith, stationing himself four places above Faranah had dropped an Unpopularity Pill into the fourth cup. The steward passed along the line; each intervening Parliamentarian took a cup and Faranah received the cup with the pill. Now Faranah's audience regarded him with fastidious distaste and moved away. A whiff of odor reached Keith himself: American biochemists, he thought, had wrought effectively. Faranah smelled very poorly indeed. And Faranah glared about in bafflement.

The *Lumumba* circled the dock slowly, which now had reached a permanent bed in the sand. Aboard the dredge the Russian engineers were disengaging the pumps, preparatory to performing the same operation upon a second dock.

A steward approached Keith. "Adoui Shgawe wishes a word with you."

Keith followed the steward to the officers' mess, and as he entered met one of his colleagues on the way out.

Adoui Shgawe rose to his feet, bowed gravely. "Tamba Ngasi, please be seated. Will you take a glass of brandy?"

Keith shook his head brusquely: one of Ngasi's idiosyncrasies.

"You have met Grand Marshal Hashembe?" Shgawe asked politely.

Keith had been briefed as thoroughly as possible but on this point had no information. He evaded the question. "I have a high regard for the Grand Marshal's abilities."

Hashembe returned a curt nod, but said nothing.

"I take this occasion," said Shgawe, "to learn if you are sympathetic to my program, now that you have had an opportunity to observe it more closely."

Keith took a moment to reflect. In Shgawe's words lay the implication of previous disagreement. He submerged himself in the role of Tamba Ngasi, spoke with the sentiments Tamba Ngasi might be expected to entertain. "There is too much waste, too much foreign influence. We need water for the dry lands, we need medicine for the cattle. These are lacking while treasures are squandered

on the idiotic buildings of Fejo." From the corner of his eye he saw Hashembe's eyes narrow a trifle. Approval?

Shgawe answered, ponderously suave. "I respect your argument, but there is also this to be considered: the Russians lent us the money for the purpose of building Fejo into a symbol of progress. They would not allow the money to be used for less dramatic purposes. We accepted, and I feel that we have benefited. Prestige nowadays is highly important."

"Important, to whom? To what end?" grumbled Keith. "Why must we pretend to a glory which is not ours?"

"You concede defeat before the battle begins," said Shgawe more vigorously. "Unfortunately this is our African heritage, and it must be overcome."

Keith, in the role of Ngasi, said, "My home is Kotoba, at the backwaters of the Dasa, and my people live in mud huts. Is not the idea of glory for the people of Kotoba ridiculous? Give us water and cattle and medicine."

Shgawe's voice dropped in pitch. "For the people of Kotoba, I too want water and cattle and medicine. But I want more than this, and glory perhaps is a poor word to use."

HASHEMBE rose to his feet, bowed stiffly to Shgawe and

to Keith, and left the room. Shgawe shook his round head. "Hashembe cannot understand my vision. He wants me to expel the foreigners: the Russians, the French, the Hindus, especially the Chinese."

Keith rose to his feet. "I am not absolutely opposed to your views. Perhaps you have some sort of document I might read?" He took a casual step across the room. Shgawe shrugged, looked among his papers. Keith seemed to stumble and his knuckles touched the nape of Shgawe's plump neck. "Your pardon, Excellency," said Keith. "I am clumsy."

"No matter," said Shgawe. "Here: this and this—papers which explain my views for the development of Lakhadi and of the New Africa." He blinked. Keith picked up the papers, studied them. Shgawe's eyes drooped shut, as the drug which Keith had blasted through his skin began to permeate his body. A minute later he was asleep.

Keith moved quickly. Shgawe wore his hair in short oiled clusters; at the base of one of these Keith tied a black pellet no larger than a grain of rice, then stepped back to read the papers.

Hashembe returned to the room. He halted, looked from Shgawe to Keith. "He seems to have dozed off," said Keith and continued to read the papers.

"Adoui Shgawe!" called Hashembe. "Are you asleep?"

Shgawe's eyelids fluttered; he heaved a deep sigh, looked up. "Hashembe . . . I seem to have napped. Ah, Tamba Ngasi. Those papers, you may keep them, and I pray that you deal sympathetically with my proposals in Parliament. You are an influential man, and I depend upon your support."

"I take your words to heart, Excellency." Leaving the mess-hall Keith climbed quickly to the flying bridge. The *Lumumba* was now heading back up the coast toward Fejo. Keith touched one of his internal switches, and into his auditory channel came the voice of Shgawe: "—has changed, and on the whole become a more reasonable man. I have no evidence for this, other than what I sense in him."

Hashembe's voice sounded more faintly. "He does not seem to remember me, but many years ago when he belonged to the Leopard Society, I captured him and a dozen of his fellows at Engassa. He killed two of my men and escaped, but I bear him no grudge."

"Ngasi is a man worth careful attention," said Shgawe. "He is more subtle than he appears, and I believe, not so much of the back-country tribesman as he would have us believe."

"Possibly not," said Hashembe.

Keith switched off the connections, spoke for the encoder: "I'm aboard the *Lumumba*, we've just been out for a look at the missile docks. I've attached my No. 1 transmitter to the person of Adoui Shgawe; you'll now be picking up Shgawe's conversations. I don't dare listen in; they could detect me by the resonance. If anything interesting occurs, notify me."

He snapped back the switch; the pulse of information whisked up to the satellite and bounced down to Washington.

THE *Lumumba* entered Tabacoundi Bay, docked. Keith returned to the Hotel des Tropiques, rode the sparkling escalator to the second floor, strode along the silk and marble corridor to the door of his room. Two situations saved his life: an ingrained habit never to pass unwarily through a door, and the radar in his ear-amulets. The first keyed him to vigilance; the second hurled him aside and back, as through the spot his face had occupied flitted a shower of little glass needles. They tinkled against the far wall, fell to the floor in fragments.

Keith picked himself up, peered into the room. It was empty. He entered, closed the door. A catapult had launched the needles, a relatively simple mechanism. Someone in the ho-

tel would be on hand to observe what had happened and remove the catapult—necessarily soon.

Keith ran to the door, eased it open, looked into the corridor. Empty—but here came footsteps. Leaving the door open, Keith pressed against the wall.

The footsteps halted. Keith heard the sound of breathing. The tip of a nose appeared through the doorway; it moved inquiringly this way and that. The face came through; it turned and looked into Keith's face, almost eye to eye. The mouth opened in a gasp, then a crooked wince as Keith reached forth, grasped the neck. The mouth opened but made no sound.

Keith pulled the man into the room, shut the door. He was a mulatto, about forty years old. His cheeks were fleshy, flat, expensive, his nose a lumpy beak. Keith recognized him: Corty, his original contact in Fejo. He looked deep into the man's eyes; they were stained pink and the pupils were small; the gaze seemed leaden.

Keith sent a tingle of electricity through the rubbery body. Corty opened his mouth in agony, but failed to cry out. Keith started to speak, but Corty made a despairing sign for silence. He seized the pencil from Keith's pocket, scribbled in English: "Chinese, they have a circuit in my head, they drive me mad."

Keith stared. Corty suddenly opened his eyes wide. Yelling soundlessly he lunged for Keith's throat, clawing, tearing. Keith killed him with a gush of electricity, stood looking down at the limp body.

Heaven help the American agent who fell into Chinese hands, thought Keith. They ran wires through his brain, into the very core of the pain processes; then instructing and listening through transceivers, they could tweak, punish, or drive into frantic frenzy at will. The man was happier dead.

The Chinese had identified him. Had someone witnessed the placing of the tap on Shgawe? Or the dosing of Faranah? Or had Doutoufsky passed a broad hint? Or—the least likely possibility—did the Chinese merely wish to expunge him, as an African Isolationist?

Keith looked out into the corridor, which was untenanted. He rolled out the corpse, and then in a spirit of macabre whimsy, dragged it by the heels to the escalator, and sent it down into the lobby.

HE returned to his room in a mood of depression. North vs. East vs. South vs. West: a four-way war. Think of all the battles, campaigns, tragedies: grief beyond calculation. And to what end? The final pacification

of Earth? Improbable, thought Keith, considering the millions of years ahead. So why did he, James Keith, American citizen, masquerade as Tamba Ngasi, risking his life and wires into the pain centers of his brain? Keith pondered. The answer evidently was this: all of human history is condensed into each individual lifetime. Each man can enjoy the triumphs or suffer the defeats of all the human race. Charlemagne died a great hero, though his empire immediately split into fragments. Each man must win his personal victory, achieve his unique and selfish goal.

Otherwise, hope could not exist.

The sky over the fantastic silhouette of Fejo grew smoky purple. Colored lights twinkled in the plaza. Keith went to the window, looked off into the dreaming twilight skies. He wished no more of this business; if he fled now for home, he might escape with his life. Otherwise—he thought of Corty. In his own mind a relay clicked. The voice of Carl Sebastiani spoke soundlessly, but harsh and urgent. "Adoui Shgawe is dead—assassinated two minutes ago. The news came by your transmitter No. 1. Go to the palace, act decisively. This is a critical event."

KEITH armed himself, tested his accumulators. Sliding

back the door, he looked into the corridor. Two men in the white tunic of the Lakhadi Militia stood by the escalator. Keith stepped out, walked toward them. They became silent, watched his approach. Keith nodded with austere politeness, started to descend, but they halted him. "Sir, have you had a visitor this evening? A mulatto of early middle-age?"

"No. What is all this about?"

"We are trying to identify this man. He died under strange circumstances."

"I know nothing about him. Let me pass; I am Parliamentary Tamba Ngasi."

The militia-men bowed politely; Keith rode the escalator down into the lobby.

He ran across the plaza, passed before the six basalt warriors, approached the front of the palace. He marched up the low steps, entered the vestibule. A doorman in a red and silver uniform, wearing a plumed head-dress with a silver nose-guard, stepped forward. "Good evening sir."

"I am Tamba Ngasi, Parliamentarian. I must see His Excellency immediately."

"I am sorry, sir, Premier Shgawe has given orders not to be disturbed this evening."

Keith pointed into the foyer. "Who then is that person?"

The doorman looked, Keith tapped him in the throat with his

knuckles, held him at the nerve junctions under the ears until he stopped struggling, then dragged him back into his cubicle. He peered into the foyer. At the reception desk sat a handsome young woman in a Polynesian *lava-lava*. Her skin was golden-brown, she wore her hair piled in a soft black pyramid.

Keith entered, the young woman smiled politely up at him.

"Premier Shgawe is expecting me," said Keith. "Where may I find him?"

"I'm sorry sir, he has just given orders that he is not to be disturbed."

"Just given orders?"

"Yes, sir."

Keith nodded judiciously. He indicated her telephone. "Be so good as to call Grand Marshal Achille Hashembe, on an urgent matter."

"Your name, sir?"

"I am Parliamentary Tamba Ngasi. Hurry."

The girl bent to the telephone.

"Ask him to join me and the Premier Shgawe at once," Keith ordered curtly.

"But, sir—"

"Premier Shgawe is expecting me. Call Marshal Hashembe at once."

"Yes sir." She punched a button. "Grand Marshal Hashembe from the State Palace."

"Where do I find the Premier?" inquired Keith, moving past.

"He is in the second-floor drawing room, with his friends. A page will conduct you." Keith waited; better a few seconds delay than a hysterical receptionist.

THE page appeared: a lad of sixteen in a long smock of black velvet. Keith followed him up a flight of stairs to a pair of carved wooden doors. The page made as if to open the doors but Keith stopped him. "Return and wait for Grand Marshal Hashembe; bring him here at once."

The page retreated uncertainly, looking over his shoulder. Keith paid him no further heed. Gently he pressed the latch. The door was locked. Keith wadded a trifle of plastic explosive against the door jamb, attached a detonator, pressed against the wall.

Crack! Keith reached through the slivers, slammed the door open, stepped inside. Three startled men looked at him. One of them was Adoui Shgawe. The other two were Hsia Lu-Minh, THE Chinese Ambassador, and Vasif Doutoufsky, Chief Clerk of the Grand Lakhadi Parliament.

Doutoufsky stood with his right fist clenched and slightly advanced. On his middle finger glittered the jewel of a large ring.

Steps pounded down the corridor: the doorman and a warrior in the black leather uniform of the Raven Elite Guard.

Shgawe asked mildly, "What is the meaning of all this?"

The doorkeeper cried fiercely. "This man attacked me; he has come with an evil heart!"

"No," cried Keith in confusion. "I feared that Your Excellency was in danger; now I see that I was misinformed."

"Seriously misinformed," said Shgawe. He motioned with his fingers. "Please go."

Doutoufsky leaned over, whispered into Shgawe's ear. Keith's gaze focused on Shgawe's hand, where he also wore a heavy ring. "Tamba Ngasi, stay if you will; I wish to confer with you." He dismissed the doorkeeper and the warrior. "This man is trustworthy. You may go."

They bowed, departed. And the confusion in Keith's mind had disappeared. Shgawe started to rise to his feet, Doutoufsky sidled thoughtfully forward. Keith flung himself to the carpet; the laser beam from his flashlight slashed across Doutoufsky's face, over against Shgawe's temple. Doutoufsky croaked, clutched his burnt-out eyes; the beam from his own ring burnt a furrow up his face. Shgawe had fallen on his back. The fat body quaked, jerked and quivered. Keith struck them again with his beam and they both died. Hsia Lu-Minh, pressing against the wall stood motionless, eyes bulging in horror. Keith jumped to his feet, ran

forward. Hsia Lu-Minh made no resistance as Keith pumped anaesthetic into his neck.

Keith stood back panting, and once again the built-in radar saved his life. An impulse, not even registered by his brain, convulsed his muscles and jerked him aside. The bullet tore through his robe, grazing his skin. Another bullet sang past him. Keith saw Hashembe standing in the doorway, the bug-eyed page behind.

Hashembe took leisurely aim. "Wait," cried Keith. "I did not do this!"

HASHEMBE smiled faintly, and his trigger-finger tightened. Keith dropped to the floor, slashed the laser beam down over Hashembe's wrist. The gun dropped, Hashembe stood stern, erect, numb. Keith ran forward, hurled him to the floor, seized the page, blasted anaesthetic gas into the nape of his neck, pulled him inside, slammed shut the door.

He turned to find Hashembe groping for the gun with his left hand. "Stop!" cried Keith hoarsely. "I tell you I did not do this."

"You killed Shgawe."

"This is not Shgawe." He picked up the gun. It is a Chinese agent, his face molded to look like Shgawe."

Hashembe was skeptical. "That is hard to believe." He

looked down at the corpse. "Adoui Shgawe was not as fat as this man." He bent, lifted the thick fingers, then straightened up, "This is not Adoui Shgawe!" He inspected Doutoufsky. "The Chief Clerk, a renegade Pole."

"I thought that he worked for the Russians. The mistake almost cost me my life."

"Where is Shgawe?"

Keith looked around the room. "He must be nearby."

In the bathroom they found Shgawe's corpse. A sheet of fluoro-silicon plastic lined the tub, into which had been poured hydrofluoric acid from two large carboys. Shgawe's body lay on its back in the tub, already blurred, unrecognizable.

Choking from the fumes, Hashembe and Keith staggered back, slammed the door.

Hashembe's composure had departed. He tottered to a chair, nursing his wounded arm, muttered, "I understand nothing of these crimes."

Keith looked across to the limp form of the Chinese Ambassador. "Shgawe was too strong for them. Or perhaps he learned of the grand plan."

Hashembe shook his head numbly.

"The Chinese want Africa," said Keith. "It's as simple as that. Africa will support a billion Chinese. In fifty years there may well be another billion."



"If true," said Hashembe, "it is monstrous. And Shgawe, who would tolerate none of this, is dead."

"Therefore," said Keith, "we must replace Shgawe with a leader who will pursue the same goals."

"Where shall we find such a leader?"

"Here. I am such a leader. You control the army; there can be no opposition."

Hashembe sat for two minutes looking into space. Then he rose to his feet. "Very well. You are the new premier. If necessary, we shall dissolve the Parliament. In any event it is no more than a pen for cackling chickens."

THE assassination of Adoui Shgawe shocked the nation, all of Africa. When Grand Marshal Achille Hashembe appeared before the Parliament, and announced that the body had the choice either of electing Tamba Ngasi Premier of Lakhadi, or submitting to dissolution and martial law, Tamba Ngasi was elected premier without a demur.

Keith, wearing the black and gold uniform of the Lion Elite, addressed the chamber.

"In general, my policies are identical to those of Adoui Shgawe. He hoped for a strong United Africa; this is also my hope. He tried to avoid a dependence upon foreign powers, while accepting as much genuine help as was offered. This is also my policy. Adoui Shgawe loved his native land, and sought to make Lakhadi a light of inspiration to all Africa. I hope to do as well. The missile docks will be emplaced exactly as Adoui Shgawe planned, and our Lakhadi technicians will continue to learn how to operate these great devices."

Weeks passed. Keith restaffed the palace, and burned every square inch of floor, wall, ceiling, furniture and fixtures clear of spy-cells. Sebastiani had sent him three new operatives to function as liason and provide technical advice. Keith no longer communicated directly with Sebasti-

ani; without this direct connection with his erstwhile superior, the distinction between James Keith and Tamba Ngasi sometimes seemed to blur.

Keith was aware of this tendency, and exercised himself against the confusion. "I have taken this man's name, his face, his personality. I must think like him, I must act like him. But I cannot *be* that man!" But sometimes, if he were especially tired, uncertainty plagued him. Tamba Ngasi? James Keith? Which was the real personality?

Two months passed quietly, and a third month. The calm was like the eye of a hurricane, thought Keith. Occasionally protocol required that he meet and confer with Hsia Lu-Minh, the Chinese Ambassador. During these occasions, decorum and formality prevailed; the murder of Adoui Shgawe seemed nothing more than the wisp of an unpleasant dream. "Dream", thought Keith, the word persisting. "I live a dream." In a sudden spasm of dread, he called Sebastiani. "I'm going stale, I'm losing myself."

Sebastiani's voice was cool and reasonable. "You seem to be doing the job very well."

"One of these days," said Keith gloomily, "you'll talk to me in English and I'll answer in Swahili. And then—"

"And then?" Sebastiani prompted.

"Nothing important," said Keith. *And then you'll know that when James Keith and Tamba Ngasi met in the thorn bushes beside the Dasa River, Tamba Ngasi walked away alive and jackals ate the body of James Keith.*

Sebastiani made Keith a slightly improper suggestion: "Find yourself one of those beautiful Fejo girls and work off some of your nervous energy."

Keith somberly rejected the idea. "She'd hear relays clanking and buzzing and wonder what was wooing her."

A DAY arrived when the missile docks were finally emplaced. Eighteen great concrete cylinders, washed by the Atlantic swells, stretched in a line along the Lakhadi coast. Keith ordained a national holiday to celebrate the installation, and presided at an open air banquet in the plaza before the Parliament House. Speeches continued for hours, celebrating the new grandeur of Lakhadi: "—a nation once subject to the cruel imperial yoke, and now possessed of a culture superior to any west of China!" These were the words of Hsia Lu-Minh, with a bland side-glance for Leon Pashenko, the Russian Ambassador.

Pashenko, in his turn, spoke

with words, equally mordant. "With the aid of the Soviet Union, Lakhadi finds itself absolutely secure against the offensive maneuvers of the West. We now recommend that all technicians, except those currently employed in the training programs, be withdrawn. African manpower must shape the future of Africa!"

James Keith sat only half-listening to the voices, and without conscious formulation, into his mind came a scheme so magnificent in scope that he could only marvel. It was a policy matter; should he move without prior conference with Sebastiani? But he was Tamba Ngasi as well as James Keith. When he arose to address the gathering, Tamba Ngasi spoke.

"Comrades Pashenko and Hsia have spoken and I have listened with interest. Especially I welcome the sentiments expressed by Comrade Pashenko. The citizens of Lakhadi must perform excellently in every field, without further guidance from abroad. Except in one critical area. We still are unable to manufacture warheads for our new defense system. I therefore take this happy occasion to formally request from the Soviet Union the requisite explosive materials."

Loud applause, and now, while Hsia Lu-Minh clapped with zest, Leon Pashenko showed little en-

thusiasm. After the banquet, he called upon Keith, and made a blunt statement.

"I regret that the fixed policy of the Soviet Union is to retain control over all its nucleonic devices. We cannot accede to your request."

"A pity," said Keith.

Leon Pashenko appeared puzzled, having expected protests and argument.

"A pity, because now I must make the request of the Chinese."

Leon Pashenko pointed out the contingent dangers. "The Chinese make hard masters!"

Keith bowed the baffled Russian out of his apartment. Immediately he sent a message to the Chinese Embassy, and half an hour later Hsia Li-Minh appeared.

"The ideas expressed by Comrade Pashenko this evening seemed valuable," said Keith. "I assume you agree?"

"Wholeheartedly," declared Hsia Lu-Minh. "Naturally the program for agricultural reform we have long discussed would not come under these restraints."

"Most emphatically they would," said Keith. "However a very limited pilot program might be launched, provided that the Chinese People's Democracy supplies warheads, immediately and at once, for our eighteen missiles."

"I must communicate with my

government," said Hsia Lu-Minh.

"Please use all possible haste," said Keith, "I am impatient."

Hsia Lu-Minh returned the following day. "My government agrees to arm the missiles provided that the pilot program you envision consists of at least two hundred thousand agricultural technicians."

"Impossible! How can we support so large an incursion?"

The figure was finally set at one hundred thousand, with six missiles only being supplied with nucleonic warheads.

"This is an epoch-making agreement," declared Hsia Lu-Minh.

"It is the beginning of a revolutionary process," Keith agreed.

There was further wrangling about the phasing of delivery of the warheads *vis-a-vis* the arrival of the technicians, and negotiations almost broke down. Hsia Lu-Minh seemed aggrieved to find that Keith wanted actual and immediate delivery of the warheads, rather than merely a sombolic statement of intent. Keith, in his turn, experienced surprise when Hsia Lu-Minh objected to a proviso that the incoming "technicians" be granted only six-month visas marked TEMPORARY, with option of renewal at the discretion of the Lakhadi government. "How can these technicians identify them-

selves with the problems? How can they learn to love the soil which they must till?"

The difficulties were eventually ironed out; Hsia Lu-Minh took his leave. Almost at once Keith received a call from Sebastiani, who had only just learned of the projected China-Lakhadi treaty. Sebastiani's voice was cautious, tentative, probing. "I don't quite understand the rationale of this project."

When Keith was tired, the Tamba Ngasi element of his personality exerted greater influence. The voice which answered Sebastiani sounded impatient, harsh and rough to Keith himself.

"I did not plan this scheme by rationality, but by intuition."

Sebastiani's voice became even more cautious. "I fail to see any advantageous end to the business."

Keith, or Tamba Ngasi—whoever was dominant—laughed. "The Russians are leaving Lakhadi."

"The Chinese remain in control. Compared with the Chinese, the Russians are genteel conservatives."

"You make a mistake. I am in control!"

"Very well, Keith," said Sebastiani thoughtfully. "I see that we must trust your judgment."

Keith—or Tamba Ngasi—made a brusque reply, and took

himself to bed. Here the tension departed and James Keith lay staring into the dark.

A MONTH passed; two warheads were delivered by the Chinese, flown in from the processing plants at Ulan Bator. Cargo helicopters set them in place, and Keith made a triumphant address to Lakhadi, to Africa, and to the world. "From this day forward, Lakhadi, the Helm of Africa, must be granted its place in the world's counsels. We have sought power, not for the sake of power alone, but to secure for Africa the representation our people only nominally have enjoyed. The South no longer must defer to West, to North or to East!"

The first contingent of Chinese "technicians" arrived three days later: a thousand young men and women, uniformly clad in blue coveralls and white canvas shoes. They marched in disciplined platoons to buses, and were conveyed to a tent city near the lands on which they were to be settled.

On this day Leon Pashenko called to deliver a confidential memorandum from the President of the U.S.S.R. He waited while Keith glanced through the note.

"It is necessary to point out," read the note, "that the government of the U.S.S.R. adversely regards the expansion of Chinese

influence in Lakhadi, and holds itself free to take such steps as are necessary to protect the interests of the U.S.S.R."

Keith nodded slowly. He raised his eyes to Pashenko, who sat watching with a glassy thin-lipped smile. Keith punched a button, spoke into a mesh. "Send in the television cameras, I am broadcasting an important bulletin."

A crew hurriedly wheeled in equipment. Pashenko's smile became more fixed, his skin pasty.

The director made a signal to Keith. "You're on the air."

Keith looked into the lens. "Citizens of Lakhadi, and Africans. Sitting beside me is Leon Pashenko, Ambassador of the U.S.S.R. He has just now presented me with an official communication which attempts to interfere with the internal policy of Lakhadi. I take this occasion to issue a public rebuke to the Soviet Union. I declare that the government of Lakhadi will be influenced only by measures designed to benefit its citizens, and that any further interference by the Soviet Union may lead to a rupture of diplomatic relations."

Keith bowed politely to Leon Pashenko, who had sat full in view of the camera with a frozen grimace on his face. "Please accept this statement as a formal reply to your memorandum of this morning."

Without a word Pashenko rose to his feet and left the room.

MINUTES later Keith received a communication from Sebastiani. The soundless voice was sharper than ever Keith had heard it. "What the devil are you up to? Publicity? You've humiliated the Russians, perhaps finished them in Africa—but have you considered the risks? Not for yourself, not for Lakhadi, not even for Africa—but for the whole world?"

"I have not considered such risks. They do not affect Lakhadi."

Sebastiani's voice crackled with rage. "Lakhadi isn't the center of the universe merely because you've been assigned there! From now on—these are orders, mind you—make no moves without consulting me!"

"I have heard all I care to hear," said Tamba Ngasi. "Do not call me again, do not try to interfere in my plans." He clicked off the receiver, sighed, slumped back in his chair. Then he blinked, straightened up as the memory of the conversation echoed in his brain.

For a moment he thought of calling back and trying to explain, then rejected the idea. Sebastiani would think him mad for a fact—when he had merely been over-tired, over-tense. So Keith assured himself.

The following day he received a report from a Swiss technical group, and snorted in anger, though the findings were no more than he had expected.

The Chinese Ambassador unluckily chose this moment to pay a call, and was ushered into the premier's office. Round-faced, prim, brimming with affability, Hsia Lu-Minh came forward.

He takes me for a back-country chieftain, thought the man who was now entirely Tamba Ngasi—a man relentless as a crocodile, sly as a jackal, dark as the jungle.

Hsia Lu-Minh was full of gracious compliments. "How clearly you have discerned the course of the future! It is no mere truism to state that the colored races of the world share a common destiny."

"Indeed?"

"Indeed! And I carry the authorization of my government to permit the transfer of another group of skillful, highly trained workers to Lakhadi!"

"What of the remaining warheads for the missiles?"

"They will assuredly be delivered and installed on schedule."

"I have changed my mind," said Tamba Ngasi. "I want no more Chinese immigrants. I speak for all of Africa. Those already in this country must leave, and likewise the Chinese missions in Mali, Ghana, Sudan,

Angola, the Congolese Federation—in fact in all of Africa. The Chinese must leave Africa, completely and inalterably. This is an ultimatum. You have a week to agree. Otherwise Lakhadi will declare war upon the Chinese People's Republic."

Hsia Lu-Minh listened in astonishment, his mouth a doughnut of shock. "You are joking?" he quavered.

"You think I am joking? Listen!" Once again Tamba Ngasi called for the television crew, and again issued a public statement.

YESTERDAY I cleansed my country of the Russians; today I expel the Chinese. They helped us from our post-colonial chaos—but why? To pursue their own advantage. We are not the fools they take us to be." Tamba Ngasi jerked a finger at Hsia Lu-Minh. "Speaking on behalf of his government, Comrade Hsia has agreed to my terms. The Chinese are withdrawing from Africa. They will leave at once. Hsia Lu-Minh has graciously consented to this. Lakhadi now has a stalwart defense, and no longer needs protection from anyone. Should anyone seek to thwart this purge of foreign influence, these weapons will be instantly used, without remorse. I cannot speak any plainer." He turned to the limp Chinese ambassador. "Comrade

Hsia, in the name of Africa, I thank you for your promise of cooperation, and I shall hold you to it!"

Hsia Lu-Minh tottered from the room. He returned to the Chinese Embassy and put a bullet through his head.

Eight hours later a Chinese plane arrived in Fejo, loaded with ministers, generals and aides. Tamba Ngasi received them immediately. Ting Sieuh-Ma, the leading Chinese theoretician, spoke vehemently. "You put us into an intolerable position. You must reverse yourself!"

Tamba Ngasi laughed. "There is only one road for you to travel. You must obey me. Do you think the Chinese will profit by going to war with Lakhadi? All Africa will rise against you; you will face disaster. And never forget our new weapons. At this moment they are aimed at the most sensitive areas in China."

Ting Sieuh-Ma's laugh was mocking. "It is the least of our worries. Do you think we would trust you with active warheads? Your ridiculous weapons are as harmless as mice."

Tamba Ngasi displayed the Swiss report. "I know this. The detonators: ninety-six percent lead, four percent radioactive waste. The lithium hydride—ordinary hydrogen. You cheated me; therefore I am expelling you from Africa. As for the war-

heads, I have dealt with a certain European power; even now they are installing active materials in these missiles you profess to despise. You have no choice. Get out of Africa within the week or prepare for disaster."

"It is disaster either way," said Ting Sieuh-Ma. "But ponder: you are a single man, we are the East. Can you really hope to best us?"

Tamba Ngasi bared his stainless-steel teeth in a wolfish grin. "That is my hope."

KEITH leaned back in his chair. The deputation had departed; he sat alone in the conference chamber. He felt drained of energy, lax and listless. Tamba Ngasi, temporarily at least, had been purged.

Keith thought of the last few days, and felt a pang of terror at his own recklessness. The recklessness, rather of Tamba Ngasi, who had humiliated and confused two of the great world powers. They would not forgive him. Adoui Shgwae, a relatively mild adversary, had been dissolved in acid. Tamba Ngasi, author of absolutely intolerable policies could hardly expect to survive.

Keith rubbed his long harsh chin and tried to formulate a plan for survival. For perhaps a week he might be safe, while his enemies decided upon a plan of attack . . .

Keith jumped to his feet. Why should there be any delay whatever? Minutes now were precious to both Russians and Chinese; they must have arranged for any and all contingencies.

His communication screen tinkled; the frowning face of Grand Marshal Achille Hashembe appeared. He spoke curtly. "I cannot understand your orders. Why should we hesitate now? Clear the vermin out, send them back to their own land—"

"What orders are you talking about?" Keith demanded.

"Those you issued five minutes ago in front of the palace, relative to the Chinese immigrants."

"I see," said Keith. "You are correct. There was a misunderstanding. Ignore those orders, proceed as before."

Hashembe nodded with brusque satisfaction; the screen faded. There would be no delay whatever, thought Keith. The Chinese already were striking. He twisted a knob on the screen, and his reception clerk looked forth. She seemed startled.

"Has anyone entered the palace during the last five minutes?"

"Only yourself, sir . . . How did you get upstairs so quickly?"

Keith cut her off. He went to the door, listened, and heard the hum of the rising elevator. He ran to his private apartments, snatched open a drawer. His

weapons—gone. Betrayed by one of his servants.

Keith went to the door which led out into the terrace garden. From the garden he could make his way to the plaza and escape if he so chose. To his ears came a soft flutter of sound. Keith stepped out into the dark, searched the sky. The night was overcast; he could see only murk. But his radar apprised him of a descending object, and the infra-red detector in his hand felt heat.

From behind him, in his bedroom, came another soft sound. He turned, watched himself step warily through the door, glance around the room. They had done a good job, thought Keith, considering the shortness of the time. This version of Tamba Ngasi was perhaps a half-inch shorter than himself, the face was fuller, the skin a shade darker and not too subtly toned. He moved without the loose African swing, on legs thicker and shorter than Keith's own. Keith decided inconsequentially, that in order to simulate a Negro, it was best to begin with a Negro. In this respect at least the United States had an advantage.

The new Tamba left the bedroom. Keith slipped over to the door, intending to stalk him, attack with his bare hands, but now down from the sky came the object he had sensed on his radar:

a jigger-plane, little more than a seat suspended from four whirling air-foils. It landed softly on the dark terrace; Keith pressed against the wall, ducked behind an earthenware urn.

THE man from the sky approached, went to the sliding door, slipped into the bedroom. Keith stared. Tamba Ngasi once more, leaner and more angular than the first interloper. This Tamba from the sky looked quickly around the room, peered through the door into the corridor, stepped confidently through.

Keith followed cautiously. The Tamba from the sky jogged swiftly down the corridor, stopped at the archway giving on the tri-level study. Keith could not restrain a laugh at the farce of deadly misconceptions which now must ensue.

Sky-Tamba leapt into the study like a cat. Instantly there was an ejaculation of excitement, a sputter of deadly sound. Silence.

Keith ran to the doorway, and standing back in the shadow, peered into the study. Sky-Tamba stood holding some sort of gun or projector in one hand and a polished disc in the other. He sidled along the wall. Tamba Short-legs had ducked behind a bookcase, where Keith could hear him muttering under his breath. Sky-Tamba made a quick leap forward; from behind the book-

case came a sparkling line of light and ions. Sky-Tamba caught the beam on his shield, tossed a grenade which Tamba Short-legs thrust at the bookcase; it toppled forward; Sky-Tamba jerked back to avoid it. He tripped and sprawled awkwardly. Tamba Short-legs was on him, hacking with a hatchet, which gave off sparks and smoke where it struck.

Sky-Tamba lay dead, his mission a failure, his life ended. Tamba Short-legs rose in triumph. He saw Keith, uttered a guttural expletive of surprise. He bounded like a rubber ball down to the second landing, intending to out-flank Keith.

Keith ran to the body of Sky-Tamba, tugged at his weapon, but it was caught under the heavy body. A line of ionizing light sizzled across his face; he fell flat. Tamba Short-legs came running up the steps; Keith yanked furiously at the weapon, but there would be no time: his end had come.

Tamba Short-legs stopped short. In the doorway opposite stood a lean harsh-visaged man in white robes—still another Tamba. This one was like Keith, in skin, feature, and heft, identical except for an indefinable difference of expression. The three gazed stupefied at each other; the Tamba Short-legs aimed his electric beam. New Tamba slipped to the side like a shadow,

slashing the air with his laser. Tamba Short-legs dropped, rolled over, drove forward in a low crouch. New Tamba waited for him; they grappled. Sparks flew from their feet as each sought to electrocute the other; each had been equipped with ground circuits, and the electricity dissipated harmlessly. Tamba Short-legs disengaged himself, swung his hatchet. New Tamba dodged back, pointed his laser. Tamba Short-legs threw the hatchet, knocked the laser spinning. The two men sprang together. Keith

picked up hatchet and laser and prepared to deal with the survivor. "Peculiar sort of assassination," he reflected. "Everyone gets killed but the victim."

Tamba Short-legs and New Tamba were locked in a writhing tangle. There was a clicking sound, a gasp. One of the men stood up, faced Keith: New Tamba.

Keith aimed the laser. New Tamba held up his hands, moved back. He cried, "Don't shoot me, James Keith. I'm your replacement."

THE END

EDITORIAL

(continued from page 5)

HERE comes Heinlein again. This time with an echo of one of his great novelets, "The Roads Must Roll." That was all about a strike on the great engine-rooms that powered the transcontinental conveyor belts that served as roads of the future. Now I quote from a Westinghouse Electric Corp. release describing a system devised by two of its engineers: "Roller-Road would consist of a series of rubber rollers, similar to inverted roller skates, spaced 20 feet apart and powered by individual motors. Roller-Road would transport automobiles and their occupants in 'piggy-back' fashion aboard flat-bottomed carriers 110 feet long at speeds up to 150 miles an hour, and commuters at

speeds of 75 miles an hour." How fuddy-duddy old-fashioned can ya get, Westinghouse?

* * *

AND now for two tidbits that fascinated us, and may fascinate you:

- an ICBM uses as much fuel in one minute as the average motorist uses to run his car for 30 years. (And, if you add up the traffic-accident statistics, maybe it doesn't have the potential to kill as many innocent bystanders?)

- a rocket's nose cone, upon re-entry, generates enough heat to cook a turkey in three seconds? (And then a spoonful of ocean water for basting?)

Well, we feel lots better. All those things are out of our file—and out of our system. Now have fun at the football game while we go off to vacation at the beach.

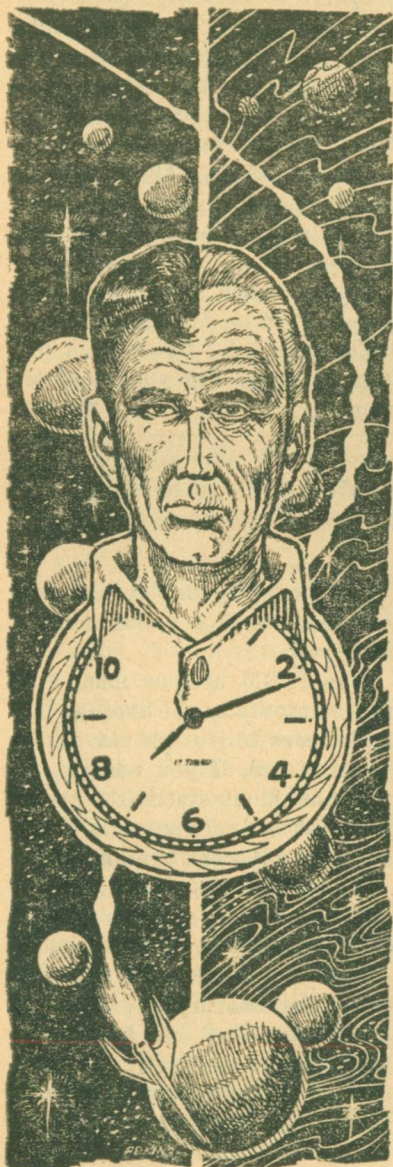
Like oases in the desert, they were spaced through the universe to replenish the electron-thirst of the giant ships. But Old Huddleston had seen the problem: What kind of currency serves to buy matter from . . .

The WELLSPRINGS OF SPACE

By ALBERT TEICHNER

Illustrated by ADKINS

THE THREE top scientists had come to describe their greatest triumph to the revered Huddleston; after centuries of bitter disagreement the world's cosmologists were now unanimous in accepting the newly-proposed Lowen-Crane-and-Fitzhugh Hypothesis. At three hundred Huddleston was doddering toward death but the great man certainly deserved to know in his more lu-



cid moments that the problems he had outlined long ago were finally solved. He had been the first to prophesy that all parsec journeys to the stars must fail because each spaceship would steadily lose electrons to the weak magnetic field of the galaxy. The few weakened shells that had managed to limp back into the solar system had proven his point.

He was having one of his brighter periods when they came in. Not only were his eyes and wrinkled flesh glowing with pink health (the illusory super-health of the very aged) but he knew instantly who they were. "My best pupils!" he chuckled, curling his plasti-patched lips. "May your lives be as long and as happy as mine has been."

Lowen, four-square solid and close to seven feet in height, almost automatically became the spokesman for the trio. "We have the best news of all for your final phase," he said with bluff kindness. "The electron leakage problem has been solved."

The old man's eyes widened and a network of hairfine lines proliferated around them. "It can't be done," he said, wistfully gazing out his window at the night sky, then at the shelves of antique bottles that ringed the room. "We're the eternal prisoners of the solar system. You shouldn't tease an old man."

"They exchanged knowingly sympathetic glances. None of them could ever be the great pioneer that he had been but even a midget standing on a giant's shoulder could see further than the giant himself.

"We now *know* there is continuous creation of matter out in space." Lowen paused dramatically for the point to sink in but the ancient only continued to look incredulous. He hurried on. "It was simply a matter of incorrect methodology, Learned Master. We have always assigned too many of the decision-functions in this area to computers when it was too purely a creative problem for anything but human minds."

HUDDLESTON had suddenly become serious. "That *could* make a difference. Well, I haven't given a moment's thought to the whole matter for fifty years—much too exhausting when you're having so many prosthetic operations, much nicer to putter around with hobbies like old maps and bottles—but, gentlemen, just before I gave up, oh now it's clear as if it were yesterday! I remember thinking what you've just said: This problem's too basic for automated analysis. If I'd only been less tired; but, by then—."

"You'd already done *more* than your share," Fitzhugh con-

soled him. "And we have more precise instruments now. The big breakthrough came on the data from the newest Jupiter observatory. Every once in a while it would pick up unaccountable Doppler shifts from the direction of Arcturus but the disturbing area was too small for an accurate fix at such a distance. That was the beginning—Crane and I worked out the rest. But Lowen made the great practical achievement. Together we achieved a hypothesis that proves beyond any question that the universe has no beginning, will have no end and is constantly receiving new matter as it expands, matter from other dimensions—in a word, continuous creation."

"You can imagine the uproar at first," Lowen grinned, "especially since the big-bang theory has held the field for two centuries. That's why we had to tell you quickly—you never surrendered your mind to any dogma, always kept it open."

Huddleston spryly took the sheaf of reports that Lowen had been holding and started to glance rapidly through them. "Brilliant, brilliant! What I'd give to be young again."

"You'll tire yourself," Fitzhugh said. "We didn't expect you to do an analysis."

"Nonsense," the old man snapped waspishly. "This gives me new life, just seeing what

you youngsters are up to. Of course, though, continuous creation can't make any difference as far as parsec travel is concerned."

"But it does!" they all shouted.

Huddleston laughed. "Now, now, gentlemen. Just because hydrogen atoms are springing into being from nothingness throughout space doesn't mean—."

"That's not how it is," Crane said, speaking down to Huddleston as if he were the tallest man in the room, not the shortest. "Lowen has shown that continuous creation does not take place everywhere. That's his great practical discovery and —"

"It happens at specific, restricted points," Lowen broke in. "Great streams of hydrogen and free electrons welling into our universe the way water does out of dry ground."

Huddleston let the report slip from his hands onto a table and stared at them. He was very pale now. "My God, I think I see what you're getting at."

They considered each other, bewildered by his reaction to such good news. "You must be missing the real point, Learned Master," said Lowen. "The well-springs are spaced at approximately one million parsecs apart. I've already pinpointed hundreds of them. We established the first one from the Jupiter readings

and the rest practically mapped themselves out. It has checked out a dozen different ways. That was one place where the computers could handle the job—on the checkout.” He tapped the report with his thumb. “Nodes of lifesaving electrons across the deepest reaches of space—.”

“—where each spaceship can bathe its weakened structure,” suggested Huddleston, “refill every lattice gap where electrons have dropped out.”

“Exactly. You still can always see to the heart of the matter, Learned Master.”

Huddleston sank into a chair, shaking his head as if dazed. “It won’t work.”

“Why not?” they demanded, astounded.

“I don’t know. I just know that it can’t work. You never get something for nothing. What would you *lose* at each well-spring?”

“Nothing!” Lowen insisted. “You see, the ship’s structure would be strengthened as the empty electron positions were refilled. Then we would shift back into hyperdrive and move on to the next wellspring. The ancient systems of caravan waterholes but on a cosmic scale.”

THE old man pounded the table energetically. “No, no! Oh, I’m willing to accept your calculations as far as they go. You

were all excellent students and have had distinguished careers and you’re in your eighties at the first peak of vigor. But nothing can be this convenient. I sense that the problem lies—.” He was chalk-white now, his hands shaking. “Lies in those maps of ancient Manhattan. Did Broadway go into Grand Central or stop at North Michigan Avenue? Annie, Annie,” he shouted, “where are the subway maps?”

His niece came running into the room, carrying some rare antique maps, and gasped as she saw him. “You’ll all have to go,” she whispered. “I’ve never seen him this bad before.”

“Here, uncle, here are your favorite maps.” He took them from her with quivering fingers, mumbling something about it being time.

“One more question,” Lowen persisted.

She whirled on him, anger making her look much younger than her nearly two centuries. “Get out of here, the whole bunch of you—distinguished men! Haven’t you the sense to see how he is? All he wants now is his little hobby.”

“But we have to get an explanation from him,” Crane protested. “It’s very import—.”

Fitzhugh tugged at his elbow. “Forget it, Crane. His mind’s far away now.”

They retreated to the door.

Eunice Huddleston gave them one sharp glance, then turned back to her uncle who was slipping into sleep, his face still deathly pale.

They stopped in the garden outside the great man's house and Crane shook his head, worried. "I'd give a lot to know what he was thinking about."

Lowen thumped his back encouragingly. "He *was* a very great man but, well, after three hundred years, he's entitled to the special pleasures of senility."

"He seemed so lucid for a while," Fitzhugh said, "I mean when he saw the point of moving through the wellspring nodes to overcome materials fatigue." He shrugged. "No, you're right, Lowen. We'll have to go to the President without Huddleston's backing."

"I was thinking about his prestige. But his support really wouldn't have proven anything." Lowen shook his head. "I had no idea he had gone downhill that much in the last twenty years."

They joined in a sympathetic sigh for past greatness, then hurried on to the business of the future.

PRESIDENT Collins was pleased to see them. He was even happier when he was shown how the recent, highly-publicized discovery of the space nodes of continuous creation could be put

to practical use. "There's a serious sociological problem that this can solve for us, gentlemen. You probably haven't given it much attention since your interests lie in other directions."

"We leave that to our political leaders," Lowen nodded. "They're thoroughly competent to do so."

"Thank you, Professor,—"

"No, President Collins, you're right—I don't have time to bother with imprecise life studies." Lowen tried to keep contempt out of his grin. "A little entertainment, somewhat more theory and lots of practical technical applications—that's my personal prescription for staying fully alive."

"Anyway your work fits the present social bill to a T," President Collins went on, choosing to disregard the unpleasant aspects of his visitor's one-sided nature for the pleasant fruits they had borne. "For close to two centuries now we have known we were trapped in the general area of the solar system and society has learned to live with the limitation. But lately an indefinable restlessness has been growing—nothing in the least serious but it's there and continuous entertainment, study and sports just aren't enough to eliminate it. This renewed outward movement can, though. I'm backing your request for a new Stellar Reaches Expedition to the limit of my strength." He rubbed his chin,

smiling sadly. "You know who we ought to get in touch with? Old Huddleston. He deserves to know. Come to think of it, his opinion would still carry plenty of weight with many people."

"We've told him," Lowen announced. "He was enormously impressed with the solution."

"Good, good. Now, there's an ultimate Master, if I ever heard of one, knowledge in every area, the humanities, mathematics, logic, poetry, physics—. What did he think about fatigued metal revival at the wellsprings?"

Lowen squinted. "Sad thing, Mister President, we couldn't get much of an opinion there. He's so worn-out." Lowen disregarded Fitzhugh's conscience-stricken look. "But he did grasp what we told him before he relapsed."

"It is a sad thing, isn't it? Well, the years get us all one way or the other, don't they?"

"I guess so," said Lowen, "but, Mr. Pres—."

Collins perked up. "Tell you what, though—he's liable to get a clear period any time and we really should have his thinking on this. I'll have that niece of his notify my office as soon as it happens and we'll go right over."

"He's in very bad shape," Lowen hastened to say. "It would just wear him down more."

"That bad, heh? Then I'd better make certain we get to see him very soon."

Lowen glared at the floor, ready to kick himself for aggravating an already touchy situation.

The intervideo snapped on. "Could you come out for a moment?" his secretary whispered on screen. She looked very upset.

"Certainly, Helen, I'll be right there." President Collins turned to them. "I hope you gentlemen will excuse me."

"Of course, Mister President." They all rose and bowed slightly in his direction.

"Maps," President Collins smiled just before he went out. "That's his big hobby now, isn't it? Wonder what I'll go in for when I reach the intermittent senile phase?" He grinned. "Oh well, I still have a century before that."

As soon as the door shut, Lowen whirled on his associates. "What the hell's the matter with you two? You looked as if you were going to spill the whole beans about the old man. We have to watch our step."

"But the implication about his reaction was somewhat distorted," Fitzhugh protested.

"*Somewhat distorted!* Well, what of it? The most innocent little distortion I ever heard! We don't even know what Huddleston really means, do we?"

"That's what I mean by distorted, Lowen. You didn't convey that impression—."

Lowen exploded. "You're making me sick! You too, Crane, you looked qualmish." He leaned forward, spitting his words through clenched teeth. "The hypocrisy of it—you'd lie to your own soul if anything got in the way of this project. But now you can make nice prissy postures because I'm doing the so-called dirty work for you."

Fitzhugh waved for calm. "Agreed, agreed, Lowen, it is much more important than a squeamish little point."

"Much more important," seconded Crane.

Collins made a grim-faced return. "I have news from Huddleston's niece."

The three men tensed. "What —," asked Lowen.

"Gentlemen, you were right about the seriousness of his condition. He's dead. She said he became so excited about something you had told him that he had a serious relapse. He started to babble incoherently and never returned to articulate speech."

They leaned back, more relaxed. "A terrible blow," said Crane. "The least we can do is carry forward his work."

"You're absolutely right." Tired, he rubbed his silver eyebrows for a moment. "Gentlemen, I'll see to it that the Expedition gets every bit of support it needs."

THE next month was one of unaccustomed excitement for the tranquilly routine existence of human society. First the death of the one survivor of the earliest generation of Learned Masters and then the announcement about the renewed thrust to the stars that was to be enacted by the three men who had made it possible. There was talk for a time of constructing a larger ship that could carry a full crew complement but Lowen's arguments had quickly overcome such objections. For one thing, design and execution of the project would take many years. For another, it would require vast expenditures even in the preliminary stages. "Of course, the effort is worth any amount eventually," Lowen had been the first to emphasize, "but why not wait until we see what the results are from the smaller design first?"

"Very reasonable," President Collins had agreed. "You three have sacrificed your own interests far beyond the call of duty."

This devotion reinforced his decision to have the three men named Learned Masters *before* their theory was put to the ultimate test, a move that had been hopefully anticipated in their calculations. Here, though, some public opposition did develop. "No one has ever been named a Learned Master under the age of

one hundred and fifty," a few people pointed out. "Now, suddenly, we are told *three* men, none of them more than eighty-five, should be so honored! Even the great Huddleston never had that."

But President Collins expressed the feelings of the overwhelming majority of citizens when he said, "The successful accomplishment of the task these men have set themselves will be an even greater achievement than that of their first teacher." His viewpoint prevailed and, after much grumbling, the Solar Institute of Learning unanimously confirmed their nomination for supreme honors.

The ceremony took place four months after construction on the *New Cosmos* had begun and was celebrated in the great hall of the Institute. The world's most important figure in each major field of thought, usually a doddering oldster, gave a confirming speech; and the accompanying three-D explanations enthralled billions who suddenly discovered how bored they had been for the past century. The only flaw in an otherwise glorious day of festivities was the refusal of Eunice Huddleston to participate. She issued no public statement but they knew well enough that she still insisted they had somehow upset her uncle and that, if his death could not have been avoid-

ed, his final moments could have at least been happier ones without their intrusion.

Her abstention almost upset Fitzhugh. "Still," he managed to console himself, "she'll see the matter in a different light once we get back."

Lowen, though, remained altogether undisturbed by the development. "I feel like a distinguished oldster and like a vigorous youngster both at the same time. Learned Master—oh, my colleagues, how we've managed to speed things up!"

"Which just goes to prove," Crane laughed, "that you really can have your cake and eat it."

Planning the flight was much simpler than it seemed to the non-specialist public. Very little of a new nature had to be added to the ship's design beyond what had been known for a long time. And there was no doubt that hyperdrive speeds far beyond those of light were possible if the proper carrier components were selected from those that averaged out to the normal 186,000-mile limit. That had been mastered a long time ago. The only doubt had been about the ability to return. Now that was dispelled and they could safely plan to reach a point close to the galactic center and return within seven weeks. No calculations had been left to chance; the survey of all known factors showed that

it was no more dangerous than a journey within the solar system—and that certainly was routine by now.

If anything, popular enthusiasm increased the longer the project lasted. Thousands of men threw themselves into the round-the-clock effort and nine months after construction had commenced the great sleek ship was ready.

THE *New Cosmos* took off on a morning of bright spring sunlight but, instead of immediately moving onto special carrier components, stuck to solar velocities so that they first could make a triumphal tour of the system. Approaching Mars, they were met by a great fleet of commuting liners, rising to greet them with an enormous display of atomic fireworks, and in their circuit of Saturn they were treated to a special auroral display. Then, two days later, the last planet behind them, they moved into hyperdrive, heading for the first node of continuous creation.

Crane made his hundredth recheck and said, "We'll be there in forty minutes."

Outside the nearer stars had become tiny beeps of light, visible only for miniseconds, and only those of the farther reaches accompanied them fixedly on their way. Lowen gave regular two-minute interval readings of

structural fatigue. "The electron loss is within one part in a million of estimate—and the error is in our favor. We can proceed five hours without danger."

Fitzhugh beamed his contentment. "So much margin of safety—it's a beautiful universe!"

They established vice contact with Earth on the carrier components and spoke all at once into the receiver as the "Are you all right?" query came: "Never better!" they shouted.

Lowen was the first to pull himself out of their attack of space ecstasy. "We will start sending data following the first node," he intoned. "Twenty minutes to first report."

Then, suddenly, they were entering the area of continuous creation and looked out with awe on the one mystery in the universe that was even greater than that of life itself. The electron loss started to ease off at an accelerating rate, reached balance and finally moved into active acquisition. All around them the latticework of matter that was the *New Cosmos* was filling up again. They hurried to their assigned stations and intently studied the readings until the ship, as good as new, had passed beyond the initial wellspring.

Crane was the first to notice. After staring, hypnotized, at the master dial before him he suddenly became aware of his hand

resting on the console below it. "My God!" he croaked.

They turned to look at each other in horror. "Turn back!" Lowen shrieked.

"We can't," Fitzhugh moaned, "it's set for the next node." He struggled desperately with his console and shouted into the sender, "Top Secret Scramble to President Collins, Top—." He fought to get the words out. "We're reversing back as soon as possible. It's all wrong. This way won't work. I can't talk much longer," he wheezed. "I've set for automatic return after the next wellspring. My God, it was so beautiful and it is so horrible. We're heading straight into the next wellspring now. It—."

Then the contact went dead.

FIVE HOURS later the great ship, undamaged, made a perfect automatic landing at the precise point from which it had left. Collins and a staff from the Institute were already waiting there, nervously wondering whether they would really have to start looking for a new approach to the star travel problem. "They have to be all right," he said, as the ship came down. "It's in perfect shape. Probably some space hallucination."

As they moved toward the craft, the exit hatch opened and three wizened men came creeping out, leaning forward as if they

were resting on canes. Their individual differences were barely distinguishable beneath the leveling networks of wrinkles but they were giggling hysterically.

"Old bottles!" Lowen kept cackling and each time he said it Crane and Fitzhugh joined him in wild laughter.

Collins stared, wide-eyed. "What was it?" he said.

Lowen squinted at him and there was the slightest glint of recognition as he became briefly lucid. "Ah yes! We didn't get it for nothing. We had to pay with —." The glint disappeared and he laughed. "Old bottles! I'm going to have the biggest collection in the world."

"What happened?" Collins pleaded, knowing even then that he would never get another rational word from any of them.

"Me too! Old bottles!"

"Collect them! Maybe maps too!"

"They've gone insane and they've become diseased," said a man from the Institute, shrinking back in disgust.

"No, not that, not really that. It's something else—They're only very old."

And in the split second of his saying that last word Collins knew what it was, what they had paid with. It was the only thing with which you could buy matter—Time.

THE END

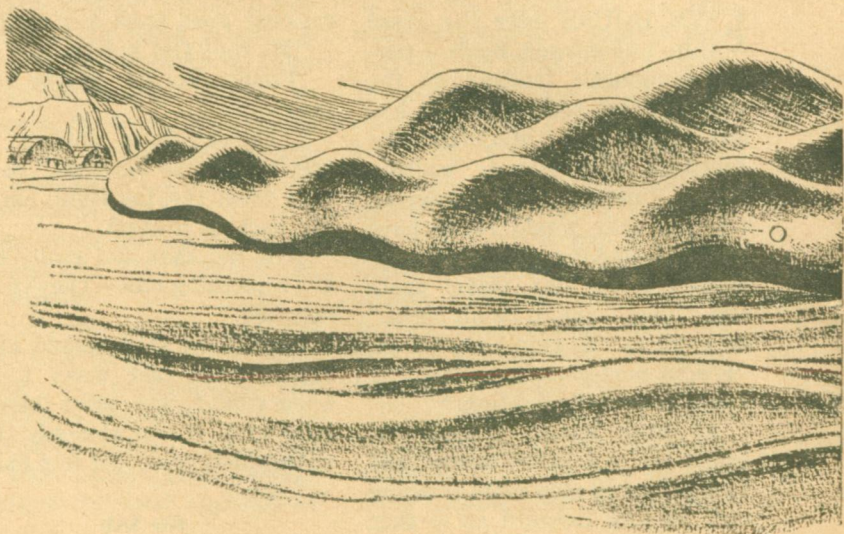
TRY to REMEMBER!

By FRANK HERBERT

The science of language—an overly-neglected field for the extrapolations of science-fiction—is put to brilliant use in this powerful story. Against a background of ultimate peril from a galactic invader, man (in this case, woman) goes back beyond Babel to recall for humanity the places of the soul, where words are not enough.

EVERY mind on earth capable of understanding the problem was focused on the spaceship

and the ultimatum delivered by its occupants. *Talk or Die!* blared the newspaper headlines.





The suicide rate was up and still climbing. Religious cults were having a field day. A book by a science fiction author: "What the Deadly Inter-Galactic Spaceship Means to You!" had smashed all previous best-seller records. And this had been going on for a frantic seven months.

The ship had *flapped* out of a gun-metal sky over Oregon, its shape that of a hideously magnified paramecium with edges that rippled like a mythological flying carpet. Its five greenskinned, froglike occupants had delivered the ultimatum, one copy printed on velvety paper to each major government, each copy couched faultlessly in the appropriate native tongue:

"You are requested to assemble your most gifted experts in human communication. We are about to submit a problem. We will open five identical rooms of our vessel to you. One of us will be available in each room."

"Your problem: To communicate with us."

"If you succeed, your rewards will be great."

"If you fail, that will result in destruction for all sentient life on your planet."

"We announce this threat with the deepest regret. You are urged to examine Eniwetok atoll for a small display of our power. Your artificial satellites have been removed from the skies."

"You must break away from this limited communication!"

Eniwetok had been cleared off flat as a table at one thousand feet depth . . . with no trace of explosion! All Russian and United States artificial satellites had been combed from the skies.

ALL DAY long a damp wind poured up the Columbia Gorge from the ocean. It swept across the Eastern Oregon alkali flats with a false prediction of rain. Spiny desert scrub bent before the gusts, sheltering blur-footed coveys of quail and floppy-eared jackrabbits. Heaps of tumbleweed tangled in the fence lines, and the air was filled with dry particles of grit that crept under everything and into everything and onto everything with the omnipresence of filterable virus.

On the flats south of the Hermiston Ordnance Depot the weird bulk of the spaceship caught pockets and eddies of sand. The thing looked like a monstrous oval of dun canvas draped across upright sticks. A cluster of quonsets and the Army's new desert prefabs dotted a rough half-circle around the north rim. They looked like dwarfed outbuildings for the most gigantic circus tent Earth had ever seen. Army Engineers said the ship was six thousand two hundred and eighteen feet

long, one thousand and fifty-four feet wide.

Some five miles east of the site the dust storm hazed across the monotonous structures of the cantonment that housed some thirty thousand people from every major nation: Linguists, anthropologists, psychologists, doctors of every shape and description, watchers and watchers for the watchers, spies, espionage and counter-espionage agents.

For seven months the threat of Eniwetok, the threat of the unknown as well, had held them in check.

Toward evening of this day the wind slackened. The drifted sand began sifting off the ship and back into new shapes, trickling down for all the world like the figurative "sands of time" that here were most certainly running out.

Mrs. Francine Millar, clinical psychologist with the Indo-European Germanic-Root team, hurried across the bare patch of trampled sand outside the spaceship's entrance. She bent her head against what was left of the windstorm. Under her left arm she carried her briefcase tucked up like a football. Her other hand carried a rolled-up copy of that afternoon's *Oregon Journal*. The lead story said that Air Force jets had shot down a small private plane trying to sneak into the restricted area.

Three unidentified men killed. The plane had been stolen.

Thoughts of a plane crash made her too aware of the circumstances in her own recent widowhood. Dr. Robert Millar had died in the crash of a trans-Atlantic passenger plane ten days before the arrival of the spaceship. She let the newspaper fall out of her hands. It fluttered away on the wind.

Francine turned her head away from a sudden biting of the sandblast wind. She was a wiry slim figure of about five feet six inches, still trim and athletic at forty-one. Her auburn hair, mussed by the wind, still carried the look of youth. Heavy lids shielded her blue eyes. The lids drooped slightly, giving her a perpetual sleepy look even when she was wide awake and alert—a circumstance she found helpful in her profession.

She came into the lee of the conference quonset, and straightened. A layer of sand covered the doorstep. She opened the door, stepped across the sand only to find more of it on the floor inside, grinding underfoot. It was on tables, on chairs, mounded in corners—on every surface.

HIKONOJO OHASHI, Francine's opposite number with the Japanese-Korean and Sino-Tibetan team, already sat at his

place on the other side of the table. The Japanese psychologist was grasping, pen fashion, a thin pointed brush, making notes in ideographic shorthand.

Francine closed the door.

Ohashi spoke without looking up: "We're early."

He was a trim, neat little man: flat features, smooth cheeks, and even curve of chin, remote dark eyes behind the inevitable thick lenses of the Oriental scholar.

Francine tossed her briefcase onto the table, and pulled out a chair opposite Ohashi. She wiped away the grit with a handkerchief before sitting down. The ever present dirt, the monotonous landscape, her own frustration—all combined to hold her on the edge of anger. She recognized the feeling and its source, stifled a wry smile.

"No, Hiko," she said. "I think we're late. It's later than we think."

"Much later when you put it that way," said Ohashi. His Princeton accent came out low, modulated like a musical instrument under the control of a master.

"Now we're going to be banal," she said. Immediately, she regretted the sharpness of her tone, forced a smile to her lips.

"They gave us no deadline," said Ohashi. "That is one thing anyway." He twirled his brush across an inkstone.

"Something's in the air," she said. "I can feel it."

"Very much sand in the air," he said.

"You know what I mean," she said.

"The wind has us all on edge," he said. "It feels like rain. A change in the weather." He made another note, put down the brush, and began setting out papers for the conference. All at once, his head came up. He smiled at Francine. The smile made him look immature, and she suddenly saw back through the years to a serious little boy named Hiko Ohashi.

"It's been seven months," she said. "It stands to reason that they're not going to wait forever."

"The usual gestation period is two months longer," he said.

She frowned, ignoring the quip. "But we're no closer today than we were at the beginning!"

Ohashi leaned forward. His eyes appeared to swell behind the thick lenses. "Do you often wonder at their insistence that *we* communicate with *them*? I mean, rather than the other way around?"

"Of course I do. So does everybody else."

He sat back. "What do you think of the Islamic team's approach?"

"You know what I think, Hiko. It's a waste of time to compare

all the Galactics' speech sounds to passages from the Koran." She shrugged. "But for all we know actually they could be closer to a solution than anyone else in . . ."

The door behind her banged open. Immediately, the room rumbled with the great basso voice of Theodore Zakheim, psychologist with the Ural-Altaic team.

"Hah-haaaaaaa!" he roared. "We're all here now!"

Light footsteps behind Zakheim told Francine that he was accompanied by Emile Goré of the Indo-European Latin-Root team.

Zakheim flopped onto a chair beside Francine. It creaked dangerously to his bulk.

Like a great uncouth bear! she thought.

"Do you always have to be so noisy?" she asked.

Goré slammed the door behind them.

"Naturally!" boomed Zakheim. "I am noisy! It's my nature, my little puchkin!"

Goré moved behind Francine, passing to the head of the table, but she kept her attention on Zakheim. He was a thick-bodied man, thick without fat, like the heaviness of a wrestler. His wide face and slanting pale blue eyes carried hints of Mongol ancestry. Rusty hair formed an uncombed brush atop his head.

Zakheim brought up his brief-

case, flopped it onto the table, rested his hands on the dark leather. They were flat slab hands with thick fingers, pale wisps of hair growing down almost to the nails.

SHE TORE her attention away from Zakheim's hands, looked down the table to where Goré sat. The Frenchman was a tall, gawk-necked man, entirely bald. Jet eyes behind steel-rimmed bifocals gave him a look of down-nose asperity like a comic bird. He wore one of his usual funereal black suits, every button secured. Knob wrists protruded from the sleeves. His long-fingered hands with their thick joints moved in constant restlessness.

"If I may differ with you, Zak," said Goré, "we are *not* all here. This is our same old group, and we were going to try to interest others in what we do here."

Ohashi spoke to Francine: "Have you had any luck inviting others to our conferences?"

"You can see that I'm alone," she said. "I chalked up five flat refusals today."

"Who?" asked Zakheim.

"The American Indian-Eskimo, the Hyperboreans, the Dravidians, the Malayo-Polynesians and the Caucasians."

"Hagglers!" barked Zakheim. "I, of course, can cover us with the Hamito-Semitic tongues, but . . ." He shook his head.

Goré turned to Ohashi. "The others?"

Ohashi said: "I must report the polite indifference of the Munda and Mon-Kmer, the Sudanese-Guinean and the Bantu."

"Those are big holes in our information exchange," said Goré. "What are they discovering?"

"No more than we are!" snapped Zakheim. "Depend on it!"

"What of the languages not even represented among the teams here on the international site?" asked Francine. "I mean the Hottentot-Bushmen, the Ainu, the Basque and the Australian-Papuan?"

Zakheim covered her left hand with his right hand. "You always have me, my little dove."

"We're building another Tower of Babel!" she snapped. She jerked her hand away.

"Spurned again," mourned Zakheim.

Ohashi said: *"Go to, let us go down, and there confound their language, that they may not understand one another's speech."* He smiled. "Genesis eleven-seven."

Francine scowled. "And we're missing about twenty percent of Earth's twenty-eight hundred languages!"

"We have all the significant ones," said Zakheim.

"How do *you* know what's significant?" she demanded.

"Please!" Goré raised a hand. "We're here to exchange information, not to squabble!"

"I'm sorry," said Francine. "It's just that I feel so hopeless today."

"Well, what have we learned today?" asked Goré.

"Nothing new with us," said Zakheim.

Goré cleared his throat. "That goes double for me." He looked at Ohashi.

The Japanese shrugged. "We achieved no reaction from the Galactic, Kobai."

"Anthropomorphic nonsense," muttered Zakheim.

"You mean naming him Kobai?" asked Ohashi. "Not at all, Zak. That's the most frequent sound he makes, and the name helps with identification. We don't have to keep referring to him as 'The Galactic' or 'that creature in the spaceship'."

Goré turned to Francine. "It was like talking to a green statue," she said.

"What of the lecture period?" asked Goré.

"Who knows?" she asked. "It stands there like a bowlegged professor in that black leotard. Those sounds spew out of it as though they'd never stop. It wriggles at us. It waves. It sways. Its face contorts, if you can call it a face. We recorded and filmed it all, naturally, but it sounded like the usual mish-mash!"

"There's something in the gestures," said Ohashi. "If we only had more competent pasimologists."

"How many times have you seen the same total gesture repeated with the same sound?" demanded Zakheim.

"You've carefully studied our films," said Ohashi. "Not enough times to give us a solid base for comparison. But I do not despair —"

"It was a rhetorical question," said Zakheim.

"We really need more multilinguists," said Goré. "Now is when we most miss the loss of such great linguists as Mrs. Millar's husband."

FRANCINE closed her eyes, took a short, painful breath. "Bob . . ." She shook her head. *No. That's the past. He's gone. The tears are ended.*

"I had the pleasure of meeting him in Paris shortly before the . . . end," continued Goré. "He was lecturing on the development of the similar sound schemes in Italian and Japanese."

Francine nodded. She felt suddenly empty.

Ohashi leaned forward. "I imagine this is . . . rather painful for Dr. Millar," he said.

"I am *very* sorry," said Goré. "Forgive me."

"Someone was going to check and see if there are any electron-

ic listening devices in this room," said Ohashi.

"My nephew is with our recording section," said Goré. "He assures me there are no hidden microphones here."

Zakheim's brows drew down into a heavy frown. He fumbled with the clasp of his briefcase. "This is very dangerous," he grunted.

"Oh, Zak, you always say that!" said Francine. "Let's quit playing footsy!"

"I do not enjoy the thought of treason charges," muttered Zakheim.

"We all know our bosses are looking for an advantage," she said. "I'm tired of these sparring matches where we each try to get something from the others without giving anything away!"

"If your Dr. Langsmith or General Speidel found out what you were doing here, it would go hard for you, too," said Zakheim.

"I propose we take it from the beginning and re-examine everything," said Francine. "Openly this time."

"Why?" demanded Zakheim.

"Because I'm satisfied that the answer's right in front of us somewhere," she said.

"In the ultimatum, no doubt," said Goré. "What do you suppose is the *real* meaning of their statement that human languages are 'limited' communication? Perhaps they are telepathic?"

"I don't think so," said Ohashi.

"That's pretty well ruled out," said Francine. "Our Rhine people say no ESP. No. I'm banking on something else: By the very fact that they posed this question, they have indicated that we *can* answer it with our present faculties."

"If they are being honest," said Zakheim.

"I have no recourse but to assume that they're honest," she said. "They're turning us into linguistic detectives for a good reason."

"A good reason for *them*," said Goré.

"Note the phraseology of their ultimatum," said Ohashi. "They *submit* a problem. They *open* their rooms to us. They are *available* to us. They *regret* their threat. Even their display of power—admittedly awe-inspiring—has the significant characteristic of non-violence. No explosion. They offer rewards for success, and this . . ."

"Rewards!" snorted Zakheim. "We lead the hog to its slaughter with a promise of food!"

"I suggest that they give evidence of being non-violent," said Ohashi. "Either that, or they have cleverly arranged themselves to present the *face* of non-violence."

Francine turned, and looked out the hut's end window at the bulk of the spaceship. The low

sun cast elongated shadows of the ship across the sand.

Zakheim, too, looked out the window. "Why did they choose this place? If it had to be a desert, why not the Gobi? This is not even a good desert! This is a miserable desert!"

"Probably the easiest landing curve to a site near a large city," said Goré. "It is possible they chose a desert to avoid destroying arable land."

"Frogs!" snapped Zakheim. "I do not trust these frogs with their problem of communication!"

FRANCINE turned back to the table, and took a pencil and scratch-pad from her briefcase. Briefly she sketched a rough outline of a Galactic, and wrote "frog?" beside it.

Ohashi said: "Are you drawing a picture of your Galactic?"

"We call it 'Uru' for the same reason you call yours 'Kobai'," she said. "It makes the sound 'Uru' ad nauseum."

She stared at her own sketch thoughtfully, calling up the memory image of the Galactic as she did so. Squat, about five feet ten inches in height, with the short bowed legs of a swimmer. Rippling muscles sent corded lines under the black leotards. The arms were articulated like a human's, but they were more graceful in movement. The skin was

pale green, the neck thick and short. The wide mouth was almost lipless, the nose a mere blunt horn. The eyes were large and spaced wide with nictating lids. No hair, but a high crowned ridge from the center of the forehead swept back across the head.

"I knew a Hawaiian distance swimmer once who looked much like these Galactics," said Ohashi. He wet his lips with his tongue. "You know, today we had a Buddhist monk from Java at our meeting with Kobai."

"I fail to see the association between a distance swimmer and a monk," said Goré.

"You told us you drew a blank today," said Zakheim.

"The monk tried no conversing," said Ohashi. "He refused because that would be a form of Earthly striving unthinkable for a Buddhist. He merely came and observed."

Francine leaned forward. "Yes?" She found an odd excitement in the way Ohashi was forcing himself to casualness.

"The monk's reaction was curious," said Ohashi. "He refused to speak for several hours afterward. Then he said that these Galactics must be very holy people."

"Holy!" Zakheim's voice was edged with bitter irony.

"We are approaching this the wrong way," said Francine. She felt let down, spoke with a con-

scious effort. "Our access to these Galactics is limited by the space they've opened to us within their vessel."

"What is in the rest of the ship?" asked Zakheim.

"Rewards, perhaps," said Goré.

"Or weapons to demolish us!" snapped Zakheim.

"The pattern of the sessions is wrong, too," said Francine.

Ohashi nodded. "Twelve hours a day is not enough," he said. "We should have them under constant observation."

"I didn't mean that," said Francine. "They probably need rest just as we do. No. I meant the absolute control our team leaders—unimaginative men like Langsmith—have over the way we use our time in those rooms. For instance, what would happen if we tried to break down the force wall or whatever it is that keeps us from actually touching these creatures? What would happen if we brought in dogs to check how *animals* would react to them?" She reached in her briefcase, brought out a small flat recorder, and adjusted it for playback. "Listen to this."

THERE was a fluid burst of sound: "Pau'timónsh'uego' ikloprépre 'sauta' urusa'a'a . . ." and a long pause followed by: "tu'kimóomo 'urulig 'lurulil 'oog 'shuquetoé . . ." pause "sum 'a 'suma 'a 'uru 't 'shóap!"

Francine stopped the playback. "Did you record that today?" asked Ohashi.

"Yes. It was using that odd illustration board with the moving pictures—weird flowers and weirder animals."

"We've seen them," muttered Zakheim.

"And those chopping movements of its hands," said Francine. "The swaying body, the undulations, the facial contortions." She shook her head. "It's almost like a bizarre dance."

"What are you driving at?" asked Ohashi.

"I've been wondering what would happen if we had a leading choreographer compose a dance to those sounds, and if we put it on for . . ."

"Faaa!" snorted Zakheim.

"All right," said Francine. "But we should be using some kind of random stimulation pattern on these Galactics. Why don't we bring in a nightclub singer? Or a circus barker? Or a magician? Or . . ."

"We tried a full-blown schizoid," said Goré.

Zakheim grunted. "And you got exactly what such tactics deserve: your schizoid sat there and played with his fingers for an hour!"

"The idea of using artists from the entertainment world intrigues me," said Ohashi. "Some *No* dancers, perhaps." He nod-

ded. "I'd never thought about it. But art is, after all, a form of communication."

"So is the croaking of a frog in a swamp," said Zakheim.

"Did you ever hear about the Paradox Frog?" asked Francine.

"Is this one of your strange jokes?" asked Zakheim.

"Of course not. The Paradox Frog is a very real creature. It lives on the island of Trinidad. It's a very small frog, but it has the opposable thumb on a five-fingered hand, and it . . ."

"Just like our visitors," said Zakheim.

"Yes. And it uses its hand just like we do—to grasp things, to pick up food, to stuff its mouth, to . . ."

"To make bombs?" asked Zakheim.

Francine shrugged, turned away. She felt hurt.

"My people believe these Galactics are putting on an elaborate sham," said Zakheim. "We think they are stalling while they secretly study us in preparation for invasion!"

Goré said: "So?" His narrow shoulders came up in a Gallic shrug that said as plainly as words: "*Even if this is true, what is there for us to do?*"

Francine turned to Ohashi. "What's the favorite theory current with your team?" Her voice sounded bitter, but she was unable to soften the tone.

"We are working on the assumption that this is a language of one-syllable root, as in Chinese," said Ohashi.

"But what of the vowel harmony?" protested Goré. "Surely that must mean the harmonious vowels are all in the same words."

Ohashi adjusted the set of his glasses. "Who knows?" he asked. "Certainly, the back vowels and front vowels come together many times, but . . ." He shrugged, shook his head.

"What's happening with the group that's working on the historical analogy?" asked Goré. "You were going to find out, Ohashi."

"They are working on the assumption that all primitive sounds are consonants with non-fixed vowels . . . foot-stampers for dancing, you know. Their current guess is that the galactics are missionaries, their language a religious language."

"What results?" asked Zakheim.

"None."

Zakheim nodded. "To be expected." He glanced at Francine. "I beg the forgiveness of the Mrs. Doctor Millar?"

She looked up, startled from a daydreaming speculation about the Galactic language and dancing. "Me? Good heavens, why?"

"I have been short-tempered today," said Zakheim. He glanced

at his wristwatch. "I'm very sorry. I've been worried about another appointment."

He heaved his bulk out of the chair, took up his briefcase. "And it is time for me to be leaving. You forgive me?"

"Of course, Zak."

His wide face split into a grin. "Good!"

Goré got to his feet. "I will walk a little way with you, Zak."

FRANCINE and Ohashi sat on for a moment after the others had gone.

"What good are we doing with these meetings?" she asked.

"Who knows how the important pieces of this puzzle will be fitted together?" asked Ohashi. "The point is: we are doing something different."

She sighed. "I guess so."

Ohashi took off his glasses, and it made him appear suddenly defenseless. "Did you know that Zak was recording our meeting?" he asked. He replaced the glasses.

Francine stared at him. "How do you know?"

Ohashi tapped his briefcase. "I have a device in here that reveals such things."

She swallowed a brief surge of anger. "Well, is it really important, Hiko?"

"Perhaps not." Ohashi took a deep, evenly controlled breath. "I did not tell you one other thing about the Buddhist monk."

"Oh, What did you omit?"

"He predicts that we will fail—that the human race will be destroyed. He is very old and very cynical for a monk. He thinks it is a good thing that all human striving must eventually come to an end."

Anger and a sudden resolve flamed in her. "I don't care! I don't care what anyone else thinks! I know that . . ." She allowed her voice to trail off, put her hands to her eyes.

"You have been very distracted today," said Ohashi. "Did the talk about your late husband disturb you?"

"I know. I'm . . ." She swallowed, whispered: "I had a dream about Bob last night. We were dancing, and he was trying to tell me something about this problem, only I couldn't hear him. Each time he started to speak the music got louder and drowned him out."

Silence fell over the room.

Presently, Ohashi said: "The unconscious mind takes strange ways sometimes to tell us the right answers. Perhaps we should investigate this idea of dancing."

"Oh, Hiko! Would you help me?"

"I should consider it an honor to help you," he said.

IT WAS QUIET IN THE semi-darkness of the projection room. Francine leaned her head

against the back rest of her chair, looked across at the stand light where Ohashi had been working. He had gone for the films on Oriental ritual dances that had just arrived from Los Angeles by plane. His coat was still draped across the back of his chair, his pipe still smoldered in the ashtray on the worktable. All around their two chairs were stacked the residue of four days' almost continuous research: notebooks, film cans, boxes of photographs, reference books.

She thought about Hiko Ohashi: a strange man. He was fifty and didn't look a day over thirty. He had grown children. His wife had died of cholera eight years ago. Francine wondered what it would be like married to an Oriental, and she found herself thinking that he wasn't really Oriental with his Princeton education and Occidental ways. Then she realized that this attitude was a kind of white snobbery.

The door in the corner of the room opened softly. Ohashi came in, closed the door. "You awake?" he whispered.

She turned her head without lifting it from the chairback. "Yes."

"I'd hoped you might fall asleep for a bit," he said. "You looked so tired when I left."

Francine glanced at her wrist-

watch. "It's only three-thirty. What's the day like?"

"Hot and windy."

Ohashi busied himself inserting film into the projector at the rear of the room. Presently, he went to his chair, trailing the remote control cable for the projector.

"Ready?" he asked.

Francine reached for the low editing light beside her chair, and turned it on, focusing the narrow beam on a notebook in her lap. "Yes. Go ahead."

"I feel that we're making real progress," said Ohashi. "It's not clear yet, but the points of identity . . ."

"They're exciting," she said. "Let's see what this one has to offer."

Ohashi punched the button on the cable. A heavily robed Arab girl appeared on the screen, slapping a tambourine. Her hair looked stiff, black and oily. A sooty line of kohl shaded each eye. Her brown dress swayed slightly as she tinkled the tambourine, then slapped it.

The cultured voice of the commentator came through the speaker beside the screen: "This is a young girl of Jebel Tobeyk. She is going to dance some very ancient steps that tell a story of battle. The camera is hidden in a truck, and she is unaware that this dance is being photographed."

A reed flute joined the tambourine, and a twanging stringed instrument came in behind it. The girl turned slowly on one foot, the other raised with knee bent.

Francine watched in rapt silence. The dancing girl made short staccato hops, the tambourine jerking in front of her.

"It is reminiscent of some of the material on the Norse sagas," said Ohashi. "Battle with swords. Note the thrust and parry."

She nodded. "Yes." The dance stamped onward, then: "Wait! Re-run that last section."

Ohashi obeyed.

IT started with a symbolic trek on camel-back: swaying, undulating. The dancing girl expressed longing for her warrior. *How suggestive the motions of her hands along her hips*, thought Francine. With a feeling of abrupt shock, she recalled seeing almost the exact gesture from one of the films of the Galactics. "There's one!" she cried.

"The hands on the hips," said Ohashi. "I was just about to stop the reel." He shut off the film, searched through the notebooks around him until he found the correct reference.

"I think it was one of Zak's films," said Francine.

"Yes. Here it is." Ohashi brought up a reel, looked at the scene identifications. He placed

the film can on a large stack behind him, re-started the film of Oriental dances.

Three hours and ten minutes later they put the film back in its can.

"How many new comparisons do you make it?" asked Ohashi.

"Five," she said. "That makes one hundred and six in all!" Francine leafed through her notes. "There was the motion of the hands on the hips. I call that one sensual pleasure."

Ohashi lighted a pipe, spoke through a cloud of smoke. "The others: How have you labeled them?"

"Well, I've just put a note on the motions of one of the Galactics and then the commentator's remarks from this dance film. Chopping motion of the hand ties to the end of Sobaya's first dream: '*Now, I awaken!*' Undulation of the body ties in with swaying of date palms in the desert wind. Stamping of the foot goes with Torak dismounting from his steed. Lifting hands, palms up—that goes with Ali offering his soul to God in prayer before battle."

"Do you want to see this latest film from the ship?" asked Ohashi. He glanced at his wrist-watch. "Or shall we get a bite to eat first?"

She waved a hand distractedly. "The film. I'm not hungry. The film." She looked up. "I keep feel-

ing that there's something I should remember . . . something . . ." She shook her head.

"Think about it a few minutes," said Ohashi. "I'm going to send out these other films to be cut and edited according to our selections. And I'll have some sandwiches sent in while I'm at it."

Francine rubbed at her forehead. "All right."

Ohashi gathered up a stack of film cans, left the room. He knocked out his pipe on a "No Smoking" sign beside the door as he left.

"Consonants," whispered Francine. "The ancient alphabets were almost exclusively made up of consonants. Vowels came later. They were the softeners, the swayers." She chewed at her lower lip. "Language constricts the *ways* you can think." She rubbed at her forehead. "Oh, if I only had Bob's ability with languages!"

She tapped her fingers on the chair arm. "It has something to do with our emphasis on *things* rather than on people and the things people do. Every Indo-European language is the same on that score. If only . . ."

"Talking to yourself?" It was a masculine voice, startling her because she had not heard the door open.

Francine jerked upright, turned toward the door. Dr. Irving Langsmith, chief of the

American Division of the Germanic-Root team stood just inside, closing the door.

"Haven't seen you for a couple of days," he said. "We got your note that you were indisposed." He looked around the room, then at the clutter on the floor beside the chairs.

Francine blushed.

DR. LANGSMITH crossed to the chair Ohashi had occupied, sat down. He was a grey-haired runt of a man with a heavily seamed face, small features—a gnome figure with hard eyes. He had the reputation of an organizer and politician with more drive than genius. He pulled a stubby pipe from his pocket, lighted it.

"I probably should have cleared this through channels," she said. "But I had visions of it getting bogged down in red tape, especially with Hiko . . . I mean with another team represented in this project."

"Quite all right," said Langsmith. "We knew what you were up to within a couple of hours. Now, we want to know what you've discovered. Dr. Ohashi looked pretty excited when he left here a bit ago."

Her eyes brightened. "I think we're onto something," she said. "We've compared the Galactics' movements to known symbolism from primitive dances."

Dr. Langsmith chuckled. "That's very interesting, my dear, but surely you . . ."

"No, really!" she said. "We've found one hundred and six points of comparison, almost exact duplication of movements!"

"Dances? Are you trying to tell me that . . ."

"I know it sounds strange," she said, "but we . . ."

"Even if you *have* found exact points of comparison, that means nothing," said Langsmith. "These are *aliens* . . . from another world. You've no right to assume that their language development would follow the same pattern as ours has."

"But they're humanoid!" she said. "Don't you believe that language started as the unconscious shaping of the *speech* organs to imitate *bodily* gestures?"

"It's highly likely," said Langsmith.

"We can make quite a few pretty safe assumptions about them," she said. "For one thing, they apparently have a rather high standard of civilization to be able to construct—"

"Let's not labor the obvious," interrupted Langsmith, a little impatiently.

Francine studied the team chief a moment, said: "Did you ever hear how Marshal Foch planned his military campaigns?"

Langsmith puffed on his pipe, took it out of his mouth. "Uh

... are you suggesting that a military ..."

"He wrote out the elements of his problem on a sheet of paper," said Francine. "At the top of the paper went the lowest common denominator. There, he wrote: '*Problem—To beat the Germans.*' Quite simple. Quite obvious. But oddly enough *beating the enemy* has frequently been overlooked by commanders who got too involved in complicated maneuvers."

"Are you suggesting that the Galactics are enemies?"

She shook her head indignantly. "I am *not*! I'm suggesting that language is primarily an instinctive social reflex. The least common denominator of a social problem is a human being. One single human being. And here we are all involved with getting this thing into mathematical equations and neat word frequency primarily oral!"

"But you've been researching a visual ..."

"Yes! But only as it modifies the sounds." She leaned toward Langsmith. "Dr. Langsmith, I believe that this language is a *flexional* language with the flexional endings and root changes contained entirely in the bodily movements!"

"HMMMMMMMM." Langsmith studied the smoke spiraling ceilingward from his pipe. "Fascinating idea!"

"We can assume that this is a highly standardized language," said Francine. "Basing the assumption on their high standard of civilization. The two usually go hand in hand."

Langsmith nodded.

"Then the gestures, the sounds would tend to be ritual," she said.

"Mmmmm-hmmmm."

"Then ... may we have the help to go into this idea the way it deserves?" she asked.

"I'll take it up at the next top staff meeting," said Langsmith. He got to his feet. "Don't get your hopes up. This'll have to be submitted to the electronic computers. It probably has been cross-checked and rejected in some other problem."

She looked up at him, dismayed. "But ... Dr. Langsmith ... a computer's no better than what's put into it. I'm certain that we're stepping out into a region here where we'll have to build up a whole new approach to language."

"Now, don't you worry," said Langsmith. He frowned. "No ... don't worry about *this*."

"Shall we go ahead with what we're doing then?" she asked. "I mean—do we have permission to?"

"Yes, yes ... of course." Langsmith wiped his mouth with the back of his hand. "General Speidel has called a special meeting tomorrow morning. I'd like

to have you attend." I'll send somebody to pick you up." He waved a hand at the litter around Francine. "Carry on, now." There was a pathetic emptiness to the way he put his pipe in his mouth and left the room. Francine stared at the closed door.

She felt herself trembling, and recognized that she was deathly afraid. *Why?* she asked herself. *What have I sensed to make me afraid?*

PRESENTLY, Ohashi came in carrying a paper bag.

"Saw Langsmith going out," he said. "What did he want?"

"He wanted to know what we're doing."

Ohashi paused beside his chair. "Did you tell him?"

"Yes. I asked for help." She shook her head. "He wouldn't commit himself."

"I brought ham sandwiches," said Ohashi.

Francine's chin lifted abruptly. "Defeated!" she said. "That's it! He acted completely defeated!"

"What?"

"I've been trying to puzzle through the strange way Langsmith was acting. He just radiated defeat."

Ohashi handed her a sandwich. "Better brace yourself for a shock," he said. "I ran into Tsu Ong, liaison officer for our

delegation . . . in the cafeteria." The Japanese raised the sandwich sack over his chair, dropped it into the seat with a curious air of preciseness. "The Russians are pressing for a combined attack on the Galactic ship to wrest their secret from them by force."

Francine buried her face in her hands. "The fools!" she whispered. "Oh, the fools!" Abruptly, sobs shook her. She found herself crying with the same uncontrollable wracking that had possessed her when she'd learned of her husband's death.

Ohashi waited silently.

The tears subsided. Control returned. She swallowed, said: "I'm sorry."

"Do not be sorry." He put a hand on her shoulder. "Shall we knock off for the night?"

She put her hand over his, shook her head. "No. Let's look at the latest films from the ship."

"As you wish." Ohashi pulled away, threaded a new film into the projector.

Presently, the screen came alive to a blue-grey alcove filled with pale light: one of the "class" rooms in the spaceship. A squat, green-skinned figure stood in the center of the room. Beside the Galactic was the pedestal-footed projection board that all five used to illustrate their "lectures". The board displayed a scene of a wide blue lake, reeds

along the shore stirring to a breeze.

The Galactic swayed. His face moved like a ripple of water. He said: "Ahon'atu'uklah'shoginai' eástruru." The green arms moved up and down, undulating. The webbed hands came out, palms facing and almost touching, began chopping from the wrists: up, down, up, down, up, down . . .

On the projection board the scene switched to an under-water view: myriad swimming shapes coming closer, closer—large-eyed fish creatures with long ridged tails.

"Five will get you ten," said Ohashi. "Those are the young of this Galactic race. Notice the ridge."

"Tadpoles," said Francine.

The swimming shapes darted through orange shadows and into a space of cold green—then up to splash on the surface, and again down into the cool green. It was a choreographic swinging, lifting, dipping, swaying—lovely in its synchronized symmetry.

"Chiruru'uklia'a'agudav'iaá," said the Galactic. His body undulated like the movements of the swimming creatures. The green hands touched his thighs, slipped upward until elbows were level with shoulders.

"The maiden in the Oriental dance," said Francine.

Now, the hands came out, palms up, in a gesture curiously suggestive of giving. The Galactic said: "Pluainumiuri!" in a single burst of sound that fell on their ears like an explosion.

"It's like a distorted version of the ritual dances we've been watching," said Ohashi.

"I've a hunch," said Francine. "Feminine intuition. The repeated vowels: they could be an adverbial emphasis, like our word *very*. Where it says 'a-a-a' note the more intense gestures."

She followed another passage, nodding her head to the gestures. "Hiko, could this be a constructed language? Artificial?"

"The thought has occurred to me," said Ohashi.

ABRUPTLY, the projector light dimmed, the action slowed. All lights went out. They heard a dull, booming roar in the distance, a staccato rattling of shots. Feet pounded along the corridor outside the room.

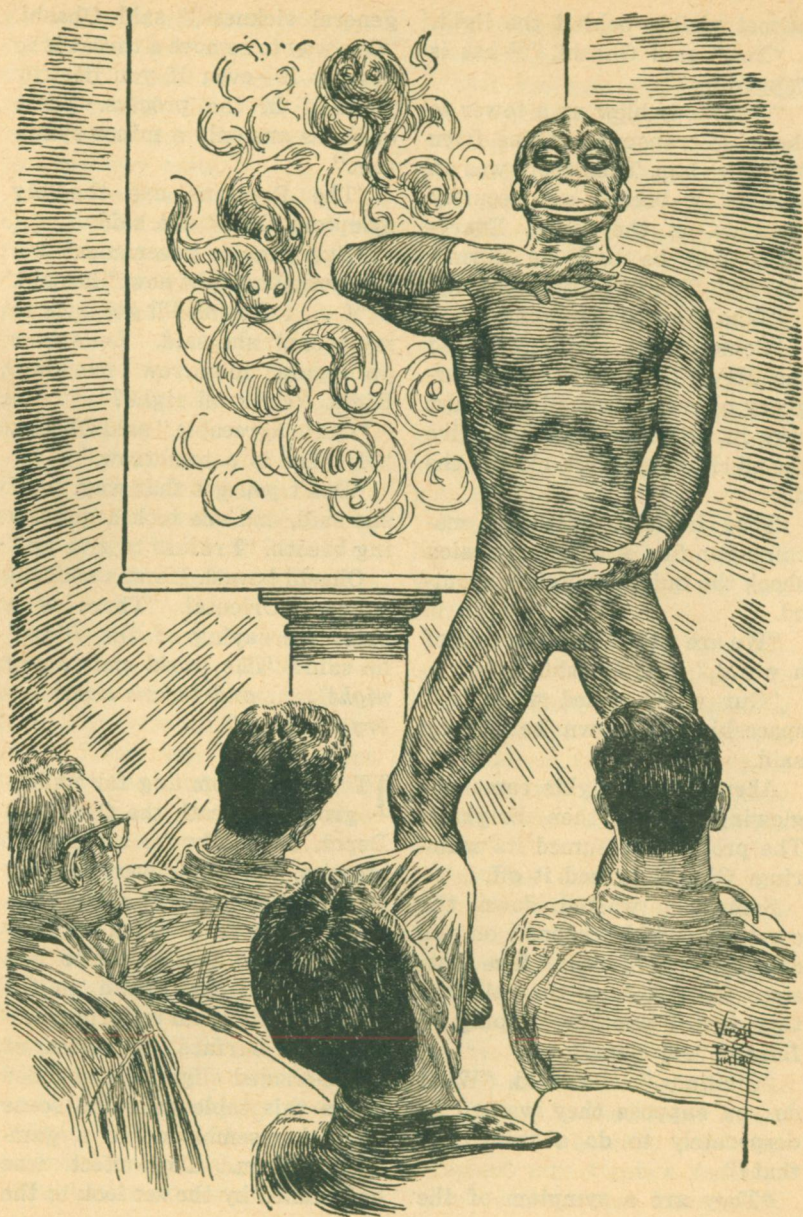
Francine sat in stunned silence.

Ohashi said: "Stay here, please. I will have a look around to see what . . ."

The door banged open and a flashlight beam stabbed into the room, momentarily blinding them.

"Everything all right in here?" boomed a masculine voice.

They made out a white MP



helmet visible behind the light.

"Yes," said Ohashi. "What is happening?"

"Somebody blew up a tower to the main transmission line from McNary Dam. Then there was an attempt to breach our security blockade on the south. Everything will be back to normal shortly." The light turned away.

"Who?" asked Francine.

"Some crazy civilians," said the MP. "We'll have the emergency power on in a minute. Just stay in this room until we give the all clear." He left, closing the door.

They heard a rattle of machine-gun fire. Another explosion shook the building. Voices shouted.

"We are witnessing the end of a world," said Ohashi.

"Our world ended when that spaceship set down here," she said.

Abruptly, the lights came on: glowing dimly, then brighter. The projector resumed its whirling. Ohashi turned it off.

Somebody walked down the corridor outside, rapped on the door, said: "All clear." The footsteps receded down the hall, and they heard another rapping, a fainter "All clear."

"Civilians," she said. "What do you suppose they wanted so desperately to do a thing like that?"

"They are a symptom of the

general sickness," said Ohashi. "One way to remove a threat is to destroy it—even if you destroy yourself in the process. These civilians are only a minor symptom."

"The Russians are the big symptom then," she said.

"Every major government is a big symptom right now," he said.

"I . . . I think I'll get back to my room," she said. "Let's take up again tomorrow morning. Eight o'clock all right?"

"Quite agreeable," said Ohashi. "If there is a tomorrow."

"Don't you get that way, too," she said, and she took a quavering breath. "I refuse to give up."

Ohashi bowed. He was suddenly very Oriental. "There is a primitive saying of the Ainu," he said: "*The world ends every night . . . and begins anew every morning.*"

IT WAS a room dug far underground beneath the Ordnance Depot, originally for storage of atomics. The walls were lead. It was an oblong space: about thirty by fifteen feet, with a very low ceiling. Two trestle tables had been butted end-to-end in the center of the room to form a single long surface. A series of green-shaded lights suspended above this table gave the scene an odd resemblance to a gambling room. The effect was heightened by the set look to the

shoulders of the men sitting in spring bottom chairs around the table. There were a scattering of uniforms: Air Force, Army, Marines; plus hard-faced civilians in expensive suits.

Dr. Langsmith occupied a space at the middle of one of the table's sides and directly across from the room's only door. His gnome features were locked in a frown of concentration. He puffed rhythmically at the stubby pipe like a witchman creating an oracle smoke.

A civilian across the table from Langsmith addressed a two-star general seated beside the team chief: "General Speidel, I still think this is too delicate a spot to risk a woman."

Speidel grunted. He was a thin man with a high, narrow face: an aristocratic face that radiated granite convictions and stubborn pride. There was an air about him of spring steel under tension and vibrating to a chord that dominated the room.

"Our choice is limited," said Langsmith. "Very few of our personnel have consistently taken wheeled carts into the ship *and* consistently taken a position close to that force barrier or whatever it is."

Speidel glanced at his wristwatch. "What's keeping them?"

"She may already have gone to breakfast," said Langsmith.

"Be better if we got her in

here hungry and jumpy," said the civilian.

"Are you sure you can handle her, Smitty?" asked Speidel.

Langsmith took his pipe from his mouth, peered into the stem as though the answer were to be found there. "We've got her pretty well analyzed," he said. "She's a recent widow, you know. Bound to still have a rather active death-wish structure."

There was a buzzing of whispered conversation from a group of officers at one end of the table. Speidel tapped his fingers on the arm of his chair.

Presently, the door opened. Francine entered. A hand reached in from outside, closed the door behind her.

"Ah, there you are, Dr. Mil-lar," said Langsmith. He got to his feet. There was a scuffling sound around the table as the others arose. Langsmith pointed to an empty chair diagonally across from him. "Sit down, please."

Francine advanced into the light. She felt intimidated, knew she showed it, and the realization filled her with a feeling of bitterness tinged with angry resentment. The ride down the elevator from the surface had been an experience she never wanted to repeat. It had seemed many times longer than it actually was—like a descent into Dante's Inferno.

She nodded to Langsmith,

glanced covertly at the others, took the indicated chair. It was a relief to get the weight off her trembling knees, and she momentarily relaxed, only to tense up again as the others resumed their seats. She put her hands on the table, immediately withdrew them to hold them clasped tightly in her lap.

WHY was I brought here like a prisoner?" she demanded.

Langsmith appeared honestly startled. "But I told you last night that I'd send somebody for you."

Speidel chuckled easily. "Some of our Security boys are a little grim-faced," he said. "I hope they didn't frighten you."

She took a deep breath, began to relax. "Is this about the request I made last night?" she asked. "I mean for help in this new line of research?"

"In a way," said Langsmith. "But first I'd like to have you answer a question for me." He pursed his lips. "Uh . . . I've never asked one of my people for just a wild guess before, but I'm going to break that rule with you. What's your guess as to why these Galactics are here?"

"Guess?"

"Logical assumption, then," he said.

She looked down at her hands. "We've all speculated, of course. They might be scientists investi-

gating us for reasons of their own."

"Damnation!" barked the civilian beside her. Then: "Sorry, ma'm. But that's the pap we keep using to pacify the public."

"And we aren't keeping them very well pacified," said Langsmith. "That group that stormed us last night called themselves the *Sons of Truth*! They had thermite bombs, and were going to attack the spaceship."

"How foolish," she whispered. "How pitiful."

"Go on with your guessing, Dr. Millar," said Speidel.

She glanced at the general, again looked at her hands. "There's the military's idea—that they want Earth for a strategic base in some kind of space war."

"It could be," said Speidel.

"They could be looking for more living space for their own kind," she said.

"In which case, what happens to the native population?" asked Langsmith.

"They would either be exterminated or enslaved, I'm afraid. But the Galactics could be commercial traders of some sort, interested in our art forms, our animals for their zoos, our archeology, our spices, our . . ." She broke off, shrugged. "How do we know what they may be doing on the side . . . secretly?"

"Exactly!" said Speidel. He

glanced sidelong at Langsmith. "She talks pretty level-headed, Smitty."

"But I don't believe any of these things," she said.

"What is it you believe?" asked Speidel.

"I believe they're just what they represent themselves to be—representatives of a powerful Galactic culture that is immeasurably superior to our own."

"Powerful, all right!" It was a marine officer at the far end of the table. "The way they cleaned off Eniwetok and swept our satellites out of the skies!"

"Do you think there's a possibility they could be concealing their true motives?" asked Langsmith.

"A possibility, certainly."

"Have you ever watched a confidence man in action?" asked Langsmith.

"I don't believe so. But you're not seriously suggesting that these . . ." She shook her head. "Impossible."

"The *mark* seldom gets wise until it's too late," said Langsmith.

She looked puzzled. "Mark?"

"The fellow the confidence men choose for a victim." Langsmith re-lighted his pipe, extinguished the match by shaking it. "Dr. Millar, we have a very painful disclosure to make to you."

She straightened, feeling a sudden icy chill in her veins at

the stillness in the room.

"Your husband's death was not an accident," said Langsmith.

She gasped, and turned deathly pale.

"In the six months before this spaceship landed, there were some twenty-eight mysterious deaths," said Langsmith. "More than that, really, because innocent bystanders died, too. These accidents had a curious similarity: In each instance there was a fatality of a foremost expert in the field of language, cryptoanalysis, semantics . . .

"The people who might have solved this problem died before the problem was even presented," said Speidel. "Don't you think that's a curious coincidence?"

She was unable to speak.

"In one instance there was a survivor," said Langsmith. "A British jet transport crashed off Ceylon, killing Dr. Ramphit U. The lone survivor, the co-pilot, said a brilliant beam of light came from the sky overhead and sliced off the port wing. Then it cut the cabin in half!"

FRANCINE put a hand to her throat. Langsmith's cautious hand movements suddenly fascinated her.

"Twenty-eight air crashes?" she whispered.

"No. Two were auto crashes." Langsmith puffed a cloud of smoke before his face.

Her throat felt sore. She swallowed, said: "But how can you be sure that?"

"It's circumstantial evidence, yes," said Speidel. He spoke with thin-lipped precision. "But there's more. For the past four months all astronomical activity of our nation has been focused on the near heavens, including the moon. Our attention was drawn to evidence of activity near the moon crater Theophilus. We have been able to make out the landing rockets of more than five hundred space craft!"

"What do you think of that?" asked Langsmith. He nodded behind his smoke screen.

She could only stare at him; her lips ashen.

"These *frogs* have massed an invasion fleet on the moon!" snapped Speidel. "It's obvious!"

They're lying to me! she thought. *Why this elaborate pretense?* She shook her head, and something her husband had once said leapt unbidden into her mind: "*Language clutches at us with unseen fingers. It conditions us to the way others are thinking. Through language, we impose upon each other our ways of looking at things.*"

Speidel leaned forward. "We have more than a hundred atomic warheads aimed at that moon-base! One of those warheads will do the job if it gets through!" He hammered a fist on the table.

"But first we have to capture this ship here!"

Why are they telling me all this? she asked herself. She drew in a ragged breath, said: "Are you sure you're right?"

"Of course we're sure!" Speidel leaned back, lowered his voice. "Why else would they insist we learn their language? The first thing a conqueror does is impose his language on his new slaves!"

"No . . . no, wait," she said. "That only applies to recent history. You're getting language mixed up with patriotism because of our own imperial history. Bob always said that such misconceptions are a serious hindrance to sound historical scholarship."

"We know what we're talking about, Dr. Millar," said Speidel.

"You're suspicious of language because our imperialism went hand in hand with our language," she said.

Speidel looked at Langsmith. "You talk to her."

"If there actually were communication in the sounds these Galactics make, you know we'd have found it by now," said Langsmith. "You know it!"

She spoke in sudden anger: "I don't know it! In fact, I feel that we're on the verge of solving their language with this new approach we've been working on."

"Oh, come now!" said Spei-

del. "Do you mean that after our finest cryptographers have worked over this thing for seven months, you disagree with them entirely?"

"No, no, let her say her piece," said Langsmith.

"We've tapped a new source of information in attacking this problem," she said. "Primitive dances."

"Dances?" Speidel looked shocked.

"Yes. I think the Galactics' gestures may be their adjectives and adverbs—the full emotional content of their language."

"Emotion!" snapped Speidel. "Emotion isn't language!"

She repressed a surge of anger, said: "We're dealing with something completely outside our previous experience. We have to discard old ideas. We know that the habits of a native tongue set up a person's speaking responses. In fact, you can define language as the system of habits you reveal when you speak."

SPEIDEL tapped his fingers on the table, stared at the door behind Francine.

She ignored his nervous distraction, said: "The Galactics use almost the full range of implosive and glottal stops with a wide selection of vowel sounds: fricatives, plosives, voiced and unvoiced. And we note an apparent lack of the usual interfering

habits you find in normal speech."

"This isn't normal speech!" blurted Speidel. "Those are nonsense sounds!" He shook his head. "Emotions!"

"All right," she said. "Emotions! We're pretty certain that language begins with emotions—pure emotional actions. The baby pushes away the plate of unwanted food."

"You're wasting our time!" barked Speidel.

"I didn't ask to come down here," she said.

"Please." Langsmith put a hand on Speidel's arm. "Let Dr. Millar have her say."

"Emotion," muttered Speidel.

"Every spoken language of earth has migrated away from emotion," said Francine.

"Can you write an emotion on paper?" demanded Speidel.

"That does it," she said. "That really tears it! You're blind! You say language has to be written down. That's part of the magic! You're mind is tied in little knots by academic tradition! Language, General, is primarily oral! People like you, though, want to make it into ritual noise!"

"I didn't come down here for an egg-head argument!" snapped Speidel.

"Let me handle this, please," said Langsmith. He made a mollifying gesture toward Francine. "Please continue."

She took a deep breath. "I'm sorry I snapped," she said. She smiled. "I think we let emotion get the best of us."

Speidel frowned.

"I was talking about language moving away from emotion," she said. "Take Japanese, for example. Instead of saying, 'Thank you' they say, 'Katajikenai'—'I am insulted.' Or they say, 'Kino doku' which means 'This poisonous feeling!'" She held up her hands. "This is ritual exclusion of showing emotion. Our Indo-European languages—especially Anglo-Saxon tongues—are moving the same way. We seem to think that emotion isn't quite nice, that . . ."

"It tells you nothing!" barked Speidel.

She forced down the anger that threatened to overwhelm her. "If you can read the emotional signs," she said, "they reveal if a speaker is telling the truth. That's all, General. They just tell you if you're getting at the truth. Any good psychologist knows this, General. Freud said it: 'If you try to conceal your feelings, every pore oozes betrayal.' You seem to think that the opposite is true."

"Emotions! Dancing!" Speidel pushed his chair back. "Smitty, I've had as much of this as I can take."

"Just a minute," said Langsmith. "Now, Dr. Millar, I want-

ed you to have your say because we've already considered these points. Long ago. You're interested in the gestures. You say this is a dance of emotions. Other experts say with equal emphasis that these gestures are ritual combat! Freud, indeed! They ooze betrayal. This chopping gesture they make with the right hand"—he chopped the air in illustration—"is identical to the karate or judo chop for breaking the human neck!"

Francine shook her head, put a hand to her throat. She was momentarily overcome by a feeling of uncertainty.

Langsmith said: "That outward thrust they make with one hand: that's the motion of a sword being shoved into an opponent! They ooze betrayal all right!"

She looked from Langsmith to Speidel, back to Langsmith. A man to her right cleared his throat.

Langsmith said: "I've just given you two examples. We have hundreds more. Every analysis we've made has come up with the same answer: treachery! The pattern's as old as time: offer a reward; pretend friendship; get the innocent lamb's attention on your empty hand while you poise the ax in your other hand!"

COULD I be wrong? she wondered. *Have we been duped*

by these Galactics? Her lips trembled. She fought to control them, whispered: "Why are you telling me these things?"

"Aren't you at all interested in revenge against the creatures who murdered your husband?" asked Speidel.

"I don't know that they murdered him!" She blinked back tears. "You're trying to confuse me!" And a favorite saying of her husband's came into her mind: "*A conference is a group of people making a difficult job out of what one person could do easily.*" The room suddenly seemed too close and oppressive.

"Why have I been dragged into this conference?" she demanded. "Why?"

"We were hoping you'd assist us in capturing that space ship," said Langsmith.

"Me? Assist you in . . ."

"Someone has to get a bomb past the force screens at the door—the ones that keep sand and dirt out of the ship. We've got to have a bomb inside."

"But why me?"

"They're used to seeing you wheel in the master recorder on that cart," said Langsmith. "We thought of putting a bomb in . . ."

"No!"

"This has gone far enough," said Speidel. He took a deep breath, started to rise.

"Wait," said Langsmith.

"She obviously has no feelings of patriotic responsibility," said Speidel. "We're wasting our time."

Langsmith said: "The Galactics are used to seeing her with that cart. If we change now, they're liable to become suspicious."

"We'll set up some other plan, then," said Speidel. "As far as I'm concerned, we can write off any possibility of further cooperation from her."

"You're little boys playing a game," said Francine. "This isn't an exclusive American problem. This is a human problem that involves every nation on Earth."

"That ship is on United States soil," said Speidel.

"Which happens to be on the only planet controlled by the human species," she said. "We ought to be sharing everything with the other teams, pooling information and ideas to get at every scrap of knowledge."

"We'd all like to be idealists," said Speidel. "But there's no room for idealism where our survival is concerned. These *frogs* have full space travel, apparently between the stars—not just satellites and moon rockets. If we get their ship we can enforce peace on our own terms."

"National survival," she said. "But it's our survival as a species that's at stake!"

Speidel turned to Langsmith. "This is one of your more spectacular failures, Smitty. We'll have to put her under close surveillance."

Langsmith puffed furiously on his pipe. A cloud of pale blue smoke screened his head. "I'm ashamed of you, Dr. Millar," he said.

She jumped to her feet, allowing her anger full scope at last. "You must think I'm a rotten psychologist!" she snapped. "You've been lying to me since I set foot in here!" She shot a bitter glance at Speidel. "Your gestures gave you away! The non-communicative emotional gestures, General!"

"What's she talking about?" demanded Speidel.

"You said different things with your mouths than you said with your bodies," she explained. "That means you were lying to me—concealing something vital you didn't want me to know about."

"She's insane!" barked Speidel.

"There wasn't any survivor of a plane crash in Ceylon," she said. "There probably wasn't even the plane crash you described."

Speidel froze to sudden stillness, spoke through thin lips: "Has there been a security leak? Good Lord!"

"Look at Dr. Langsmith there!" she said. "Hiding behind

that pipe! And you, General: moving your mouth no more than absolutely necessary to speak—trying to hide your real feelings! Oozing betrayal!"

"Get her out of here!" barked Speidel.

"You're all logic and no intuition!" she shouted. "No understanding of feeling and art! Well, General: go back to your computers, but remember this—You can't build a machine that thinks like a man! You can't feed emotion into an electronic computer and get back anything except numbers! Logic, to you, General!"

"I said get her out of here!" shouted Speidel. He rose half out of his chair, turned to Langsmith who sat in pale silence. "And I want a thorough investigation! I want to know where the security leak was that put her wise to our plans."

"Watch yourself!" snapped Langsmith.

Speidel took two deep breaths, sank back.

They're insane, thought Francine. Insane and pushed into a corner. With that kind of fragmentation they could slip into catatonia or violence. She felt weak and afraid.

Others around the table had arisen. Two civilians moved up beside Francine. "Shall we lock her up, General?" asked one.

Speidel hesitated.

Langsmith spoke first: "No. Just keep her under very close surveillance. If we locked her up it would arouse questions that we don't want to answer."

Speidel glowered at Francine. "If you give us away, I'll have you shot!" He motioned to have her taken out of the room.

WHEN she emerged from the headquarters building, Francine's mind still whirled. *Lies!* she thought. *All lies!*

She felt the omnipresent sand grate under her feet. Dust hazed the concourse between her position on the steps and the spaceship a hundred yards away. The morning sun already had burned off the night chill of the desert. Heat devils danced over the dun surface of the ship.

Francine ignored the security agent loitering a few steps behind her, glanced at her wristwatch; nine-twenty. *Hiko will be wondering what's happened to me*, she thought. *We were supposed to get started by eight.* Hopelessness gripped her mind. The spaceship looming over the end of the concourse appeared like a malignant growth—an evil thing crouched ready to envelope and smother her.

Could that fool general be right? The thought came to her mind unbidden. She shook her head. *No! He was lying! But why did he want me to . . . De-*

layed realization broke off the thought. They wanted me to take a small bomb inside the ship, but there was no mention of my escaping! I'd have had to stay with the cart and the bomb to allay suspicions. My God! Those beasts expected me to commit suicide for them! They wanted me to blame the Galactics for Bob's death! They tried to build a lie in my mind until I'd fall in with their plan. It's hard enough to die for an ideal, but to give up your life for a lie . . .

Anger coursed through her. She stopped on the steps, stood there shivering. A new feeling of futility replaced the anger. Tears blurred her vision. *What can one lone woman do against such ruthless schemers?*

Through her tears, she saw movement on the concourse: a man in civilian clothes crossing from right to left. Her mind registered the movement with only partial awareness: *man stops, points.* She was suddenly alert, tears gone, following the direction of the civilian's extended right arm, hearing his voice shout: "Hey! Look at that!"

A thin needle of an aircraft stitched a hurtling line across the watery desert sky. It banked, arrowed toward the spaceship. Behind it roared an airforce jet—delta wings vibrating, sun flashing off polished metal. Tracers laced out toward the airship.

Someone's attacking the spaceship! she thought. *It's a Russian ICBM!*

But the needle braked abruptly, impossibly, over the spaceship. Behind it, the airforce jet's engine died, and there was only the eerie whistling of air burning across its wings.

Gently, the needle lowered itself into a fold of the spaceship.

It's one of theirs—the Galactics' she realized. *Why is it coming here now? Do they suspect attack? Is that some kind of reinforcement?*

Deprived of its power, the jet staggered, skimmed out to a dust-geyser, belly-landing in the alkali flats. Sirens screamed as emergency vehicles raced toward it.

The confused sounds gave Francine a sudden feeling of nausea. She took a deep breath, and stepped down to the concourse, moving without conscious determination, her thoughts in a turmoil. The grating sand beneath her feet was like an emery surface rubbing her nerves. She was acutely conscious of an acrid, burning odor, and she realized with a sudden stab of alarm that her security guard still waited behind her on the steps of the administration building.

Vaguely, she heard voices babbling in the building doorways on both sides of the concourse—people coming out to stare at the spaceship and off across the flats

where red trucks clustered around the jet.

A pebble had worked its way into her right shoe. Her mind registered it, rejected an urge to stop and remove the irritant. An idea was trying to surface in her mind. Momentarily, she was distracted by a bee humming across her path. Quite inanely her mind dwelt on the thought that the insect was too commonplace for this moment. A mental drunkenness made her giddy. She felt both elated and terrified. *Danger! Yes: terrible danger*, she thought. *Obliteration for the entire human race. But something*

AN explosion rocked the concourse, threw her stumbling to her hands and knees. Sand burned against her palms. Dumb instinct brought her back to her feet. Another explosion—farther away to the right, behind the buildings. Bitter smoke swept across the concourse. Abruptly, men lurched from behind the buildings on the right, slogging through the sand toward the spaceship.

Civilians! Possibly—and yet they moved with the purposeful unity of soldiers.

It was like a dream scene to Francine. The men carried weapons. She stopped, saw the gleam of sunlight on metal, heard the peculiar crunch-crunch of men

running in sand. Through a dreamy haze she recognized one of the runners: Zakheim. He carried a large black box on his shoulders. His red hair flamed out in the group like a target.

The Russians! she thought. *They've started their attack! If our people join them now, it's the end!*

A machinegun stuttered somewhere to her right. Dust puffs walked across the concourse, swept into the running figures. Men collapsed, but others still slogged toward the spaceship. An explosion lifted the leaders, sent them sprawling. Again, the machinegun chattered. Dark figures lay on the sand like thrown dominoes. But still a few continued their mad charge.

MP's in American uniforms ran out from between the buildings on the right. The leaders carried submachineguns.

We're stopping the attack, thought Francine. But she knew the change of tactics did not mean a rejection of violence by Speidel and the others. It was only a move to keep the Russians from taking the lead. She clenched her fists, ignored the fact that she stood exposed—a lone figure in the middle of the concourse. Her senses registered an eerie feeling of unreality.

Machineguns renewed their chatter and then—abrupt silence. But now the last of the

Russians had fallen. Pursuing MP's staggered. Several stopped, wrenched at their guns.

Francine's shock gave way to cold rage. She moved forward, slowly at first and then striding. Off to the left someone shouted: "Hey! Lady! Get down!" She ignored the voice.

There on the sand ahead was Zakheim's pitiful crumpled figure. A gritty redness spread around his chest.

Someone ran from between the buildings on her left, waved at her to go back. *Hiko!* But she continued her purposeful stride, compelled beyond any conscious willing to stop. She saw the red-headed figure on the sand as though she peered down a tunnel.

Part of her mind registered the fact that Hiko stumbled, slowing his running charge to intercept her. He looked like a man clawing his way through water.

Dear Hiko, she thought. *I have to get to Zak. Poor foolish Zak. That's what was wrong with him the other day at the conference. He knew about this attack and was afraid.*

Something congealed around her feet, spread upward over her ankles, quickly surged over her knees. She could see nothing unusual, but it was as though she had plowed into a pool of molasses. Every step took terrible effort. The molasses pool moved above her hips, her waist.

So that's why Hiko and the MP's are moving so slowly, she thought. It's a defensive weapon from the ship. Must be.

Zakheim's sprawled figure was only three steps away from her now. She wrenched her way through the congealed air, panting with the exertion. Her muscles ached from the effort. She knelt beside Zakheim. Ignoring the blood that stained her skirt she took up one of his outstretched hands, felt for a pulse. Nothing. Now, she recognized the marks on his jacket. They were bullet holes. A machinegun burst had caught him across the chest. He was dead. She thought of the big garrulous red-head, so full of blooming life only minutes before. *Poor foolish Zak.* She put his hand down gently, shook the tears from her eyes. A terrible rage swelled in her.

She sensed Ohashi nearby, struggling toward her, heard him gasp: "Is Zak dead?"

Tears dripped unheeded from her eyes. She nodded. "Yes, he is." And she thought: *I'm not crying for Zak. I'm crying for myself . . . for all of us . . . so foolish, so determined, so blind . . .*

"EARTH PEOPLE!" The voice roared from the spaceship, cutting across all thought, stilling all emotion into a waiting fear. "WE HAD HOPED YOU COULD LEARN TO COMMUNICATE!"

roared the voice. "YOU HAVE FAILED!"

Vibrant silence.

THOUGHTS that had been struggling for recognition began surging to the surface of Francine's mind. She felt herself caught in the throes of a mental earthquake, her soul brought to a crisis as sharp as that of giving birth. The crashing words had broken through a last barrier in her mind. "COMMUNICATE!" At last she understood the meaning of the ultimatum.

But was it too late?

"No!" she screamed. She surged to her feet, shook a fist at the ship. "Here's one who didn't fail! I know what you meant!" She shook both fists at the ship. "See my hate!"

Against the almost tangible congealing of air she forced her way toward the now silent ship, thrust out her left hand toward the dead figures on the sand all around her. "You killed these poor fools! What did you expect from them? You did this! You forced them into a corner!"

The doors of the spaceship opened. Five green-skinned figures emerged. They stopped, stood staring at her, their shoulders slumped. Simultaneously, Francine felt the thickened air relax its hold upon her. She strode forward, tears coursing down her cheeks.

"You made them afraid!" she shouted. "What else could they do? The fearful can't think."

Sobs overcame her. She felt violence shivering in her muscles. There was a terrible desire in her—a need to get her hands on those green figures, to shake them, hurt them. "I hope you're proud of what you've done."

"QUIET!" boomed the voice from the ship.

"I will not!" she screamed. She shook her head, feeling the wildness that smothered her inhibitions. "Oh, I know you were right about communicating . . . but you were wrong, too. You didn't have to resort to violence."

The voice from the ship intruded on a softer tone, all the more compelling for the change: "Please?" There was a delicate sense of pleading to the word.

Francine broke off. She felt that she had just awakened from a lifelong daze, but that this clarity of thought-cum-action was a delicate thing she could lose in the wink of an eye.

"We did what we had to do," said the voice. "You see our five representatives there?"

Francine focused on the slump-shouldered Galactics. They looked defeated, radiating sadness. The gaping door of the ship a few paces behind was like a mouth ready to swallow them.

"Those five are among the eight hundred survivors of a

race that once numbered six billion," said the voice.

Francine felt Ohashi move up beside her, glanced sidelong at him, then back to the Galactics. Behind her, she heard a low mumbling murmur of many voices. The slow beginning of reaction to her emotional outburst made her sway. A sob caught in her throat.

The voice from the ship rolled on: "This once great race did not realize the importance of unmistakable communication. They entered space in that sick condition—hating, fearing, fighting. There was appalling bloodshed on their side and—ours—before we could subdue them."

A scuffling sound intruded as the five green-skinned figures shuffled forward. They were trembling, and Francine saw glistening drops of wetness below their crests. Their eyes blinked. She sensed the aura of sadness about them, and new tears welled in her eyes.

"The eight hundred survivors—to atone for the errors of their race and to earn the right of further survival—developed a new language," said the voice from the ship. "It is, perhaps, the ultimate language. They have made themselves the masters of all languages to serve as our interpreters." There was a long pause, then: "Think very carefully, Mrs. Millar. Do you

know why they are our interpreters?"

The held breath of silence hung over them. Francine swallowed past the thick tightness in her throat. This was the moment that could spell the end of the human race, or could open new doors for them—and she knew it.

"Because they cannot lie," she husked.

"Then you have truly learned," said the voice. "My original purpose in coming down here just now was to direct the sterilization of your planet. We thought that your military preparations were a final evidence of your failure. We see now that this was merely the abortive desperation of a minority. We have acted in haste. Our apologies."

THE green-skinned Galactics shuffled forward, stopped two paces from Francine. Their ridged crests drooped, shoulders sagged.

"Slay us," croaked one. His eyes turned toward the dead men on the sand around them.

Francine took a deep, shuddering breath, wiped at her damp eyes. Again she felt the bottomless sense of futility. "Did it have to be this way?" she whispered.

The voice from the ship answered: "Better this than a sterile planet—the complete destruction of your race. Do not blame

our interpreters. If a race can learn to communicate, it can be saved. Your race can be saved. First we had to make certain you held the potential. There will be pain in the new ways, no doubt. Many still will try to fight us, but you have not yet erupted fully into space where it would be more difficult to control your course."

"Why couldn't you have just picked some of us, tested a few of us?" she demanded. "Why did you put this terrible pressure on the entire world?"

"What if we had picked the wrong ones?" asked the voice. "How could we be certain with a strange race such as yours that we had a fair sampling of your highest potential? No. All of you had to have the opportunity to learn of our problem. The pressure was to be certain that your own people chose their best representatives."

Francine thought of the unimaginative rule-book followers who had led the teams. She felt hysteria close to the surface.

So close. So hellishly close!

Ohashi spoke softly beside her: "Francine?"

It was a calming voice that subdued the hysteria. She nodded. A feeling of relief struggled for recognition within her, but it had not penetrated all nerve channels. She felt her hands twitching.

Ohashi said: "They are speaking English with you. What of their language that we were supposed to solve?"

"We leaped to a wrong conclusion, Hiko," she said. "We were asked to communicate. We were supposed to remember our own language—the language we knew in childhood, and that was slowly lost to us through the elevation of reason."

"Ahhhhh," sighed Ihashi.

All anger drained from her now, and she spoke with sadness. "We raised the power of reason, the power of manipulating words, above all other faculties. The written word became our god. We forgot that before words there were actions—that there have always been things beyond words. We forgot that the spoken word preceded the written one. We forgot that the written forms of our letters came from ideographic pictures—that standing behind every letter is an image like an ancient ghost. The image stands for natural movements of the body or of other living things."

"The dances," whispered Ohashi.

"Yes, the dances," she said. "The primitive dances did not forget. And the body did not forget—not really." She lifted her hands, looked at them. "I am my own past. Every incident that ever happened to every ancestor

of mine is accumulated within me." She turned, faced Ohashi.

He frowned. "Memory stops at the beginning of your . . ."

"And the body remembers beyond," she said. "It's a different kind of memory: encysted in an overlay of trained responses like the thing we call language. We have to look back to our childhood because all children are primitives. Every cell of a child knows the language of emotional movements—the clutching reflexes, the wails and contortions, the sensuous twistings, the gentle reassurances."

"And you say these people cannot lie," murmured Ohashi.

Francine felt the upsurge of happiness. It was still tainted by the death around her and the pain she knew was yet to come for her people, but the glow was there expanding. "The body," she said, and shook her head at the scowl of puzzlement on Ohashi's face. "The intellect . . ." She broke off, aware that Ohashi had not yet made the complete transition to the new way of communicating, that she was still most likely the only member of her race even aware of the vision on this high plateau of being.

OHASHI shook his head, and sunlight flashed on his glasses. "I'm trying to understand," he said.

"I know you are," she said. "Hiko, all of our Earth languages have a bias toward insanity because they split off the concept of intellect from the concept of body. That's an oversimplification, but it will do for now. You get fragmentation this way, you see? Schizophrenia. These people now—" She gestured toward the silent Galactics. "—they have reunited body and intellect in their communication. A gestalten thing that requires the total being's participation. They cannot lie because that would be to lie to themselves—and this would completely inhibit speech." She shook her head. "Speech is not the word, but it is the only word we have now."

"A paradox," said Ohashi.

She nodded. "The self that is one cannot lie to the self. When body and intellect say the same thing . . . that is truth. When words and wordlessness agree . . . that is truth. You see?"

Ohashi stood frozen before her, eyes glistening behind the thick lenses. He opened his mouth, closed it, then bowed his head. In that moment he was the complete Oriental and Francine felt that she could look through him at all of his ancestry, seeing and understanding every culture and every person that had built to the point of the pyramid here in one person: Hiko Ohashi.

"I see it," he murmured. "It was example they showed. Not words to decipher. Only example for recognition, to touch our memories and call them forth. What great teachers! What great masters of being!"

One of the Galactics stepped closer, gestured toward the area behind Francine. His movements and the intent were clear to her, interpreted through her new understanding.

The Galactic's wide lips moved. "You are being recorded," he said. "It would be an opportune moment to begin the education of your people—since all new things must have a point of birth."

She nodded, steeling herself before turning. *Even with the pain of birth*, she thought. This was the moment that would precipitate the avalanche of change. Without knowing precisely how she would set off this chain reaction, she had no doubt that she would do it. Slowly, she turned, saw the movie cameras, the television lenses, the cone microphones all directed at her. People were pressed up against an invisible wall that drew an arc around the ship's entrance and this charmed circle where she stood. *Part of the ship's defenses*, she thought. *A force field to stop intruders.*

A muted murmuring came from the wall of people.

Francine stepped toward them, saw the lenses and microphones adjust. She focused on angry faces beyond the force field—and faces with fear—and faces with nothing but a terrible awe. In the foreground, well within the field, lay Zakheim's body, one hand outstretched and almost pointing at her. Silently, she dedicated this moment to him.

LISTEN to me very carefully, she said. "But more important, see beyond my words to the place where words cannot penetrate." She felt her body begin to tingle with a sudden release of energy. Briefly, she raised herself onto her toes. "If you see the truth of my message, if you see through to this place that I show you, then you will enter a higher order of existence: happier, sadder. Everything will take on more depth. You will feel more of all the things there are in this universe for us to feel."

Her new-found knowledge was like a shoring up within, a bottomless well of strength.

"All the window widows of all the lonely homes of Earth am I," she said. And she bent forward. It was suddenly not Dr. Francine Millar, psychologist, there on the sand. By the power of mimesis, she projected the figure of a woman in a housedress leaning on a windowsill, staring hopelessly into an empty future.

"And all the happy innocence seeking pain."

Again, she moved: the years peeled away from her. And now, she picked up a subtle rhythm of words and movements that made experienced actors cry with envy when they saw the films.

"Nature building Nature's thunder am I," she chanted, her body swaying.

"Red roses budding

"And the trout thudding water

"And the moon pounding out stars

"On an ocean wake—

"All these am I!

"A fast hurling motion am I!

"What you think I am—that I am not!

"Dreams tell your senses all my names:

"Not harshly loud or suddenly neglectful, sarcastic, preoccupied or rebukeful—

"But murmuring.

"You abandoned a twelve-hour day for a twelve-hour night

"To meddle carefully with eternity!

"Then you realize the cutting hesitancy

"That prepares a star for wishing . . .

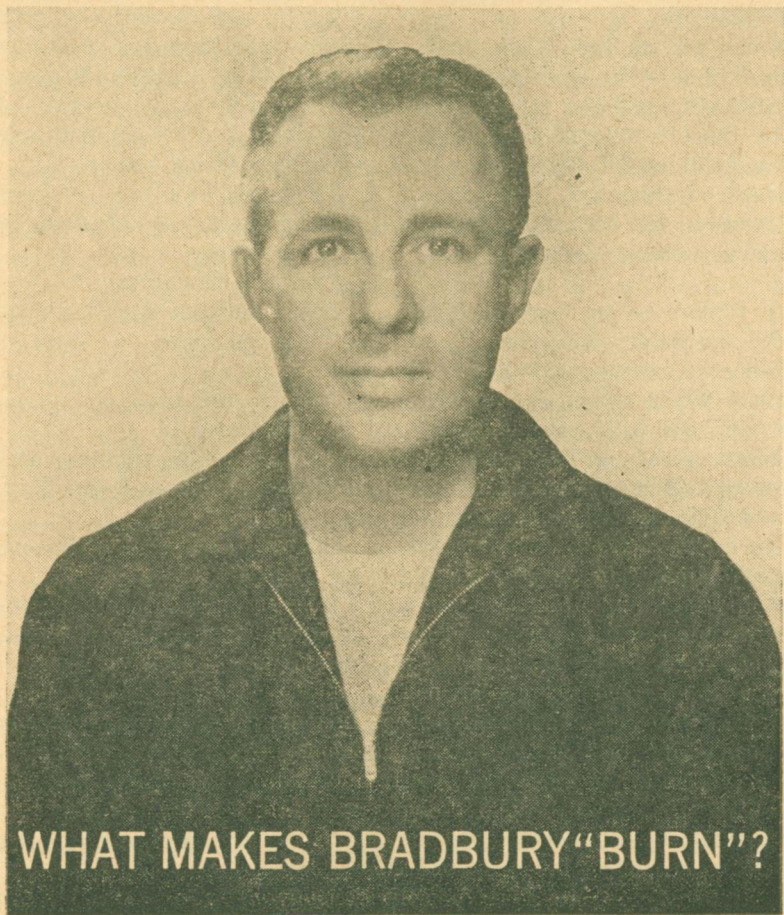
"When you see my proper image—

"A candle flickering am I.

"Then you will feel the lonely intercourse of the stars.

"Remember! Remember! Remember!"

THE END



WHAT MAKES BRADBURY "BURN"?

BYOND cavil, the most widely and enthusiastically accepted science fiction author to vault out of the perishable pulp paper obscurity in the present generation is Ray Bradbury.

Product of a field where outstanding literary achievement is rewarded only by the adulation of a coterie of devotees and a few cents a word from the publications, his achievements, notable

by any standards, are unparalleled.

For example, in 1954 The National Institute of Arts and Letters presented him with the \$1,000 annual award "for his contribution to American Literature in *The Martian Chronicles* and *The Illustrated Man*," two integrated collections of short stories, most of them culled from the science fiction magazines. The same year, The Commonwealth Club of California gave him their Second Annual Gold Medal for *Fahrenheit 451*, the book title of *The Fireman*, a short novel which first appeared in GALAXY SCIENCE FICTION.

These were merely two of dozens of special honors heaped upon him since 1946 as the special quality of his work was recognized by a wider audience. Awards were not the only satisfaction Bradbury received. Following an almost continuous stream of sales to top-paying markets like SATURDAY EVENING POST, COLLIERS, ESQUIRE, NEW YORKER, MCCALL'S, SEVENTEEN and MCLEAN'S MAGAZINE, he received a contract to write the screenplay of John Huston's *Moby Dick*, starring Gregory Peck. Reprintings and anthology appearances of his stories have mounted into the hundreds and the presentations of his stories on radio and television is rapidly approaching the one hundred

mark. When a new Ray Bradbury book appears it gets serious attention from the newspapers and periodicals that count. No one any longer debates his qualifications for the big time. The question now is how fine will his skills develop and how far will they carry him.

Usually an evaluation of an author will at least lightly touch upon his childhood, even if events there do not directly appear to influence his writings. In Bradbury's case, his childhood and teen years are a major consideration in his motivation.

RAY Douglas Bradbury shares with comedian Jack Benny the distinction of having been born in Waukegan, Ill. The date was August 22, 1920. His father was descended from an English family which settled here in 1630. His mother was of Swedish origin. A brother and sister died during infancy and he grew up with one older brother. Bradbury's infrequent references to his mother display considerable affection. He rarely mentions his father "who had a job with a power company," and when he finally pulls back the curtain in his dedication to *A Medicine for Melancholy*, published in 1959: "For Dad, whose love, very late in life, surprised his son," it is most revealing.

There are implications of a

not-too-happy childhood in his autobiographical sketch in *WEIRD TALES* for November, 1943, where he states: "Some of my first memories concern going upstairs at night and finding an unpleasant beast waiting at the next to the last step. Screaming, I'd run back down to mother. Then, together, we'd climb the stairs. Invariably, the monster would be gone. Mother never saw it. Sometimes I was irritated at her lack of imagination.

"I imagine I should be thankful for my fear of the dark, though. You have to know fear and apprehension in some form before you can write about it thoroughly, and God knows my first ten years were full of the usual paraphernalia of ghosts and skeletons and dead men tumbling down the twisting interior of my mind. What a morbid little brat I must have been to have around."

He also refers to his problems with youthful bullies and most pointedly, in his essay *Where Do You Get Your Ideas* in the 1950 issue of the amateur publication *ETAION SHRDLU* says: "One is not very old before one realizes how alone one is in the world."

Many of the tales of the weird, horrifying and supernatural written by Bradbury are derived from his childhood fears and are set in midwestern Waukegan. The same backdrop is provided

for *Dandelion Wine*, a connected series of short stories issued in 1957 which recreates with nostalgia Waukegan in 1928. But by the 1950's it is a plusher, more contented Bradbury assembling this book. He has a wife and three daughters, a fine reputation, a bank account, and a pleasant home. Therefore, the painful is subdued and the pleasant highlighted. Nevertheless, the youthful hero, Douglas (and Douglas is Ray Bradbury's middle name), has woven a few of his horror tales into the fabric, most notably *The Night*.

Bradbury's autobiographical sketches reveal an almost uninterrupted indoctrination in fantasy, starting before he could read. His mother read him the *Oz* series and his aunt let him have Edgar Allan Poe straight. Bradbury's introduction to magazine science fiction is recorded with preciseness. It was the Fall, 1928, issue of *AMAZING STORIES QUARTERLY*, featuring A. Hyatt Verrill's intriguing novel *The World of the Giant Ants*, and illustrated by the fascinating imaginings of Frank R. Paul, which were more than enough to evoke a sense of wonder in any normal child. The issue was passed on to the eight-year-old by a teen-age girl boarding with the family. From then on he was an inveterate fan.

THE depression in 1932 may have been one factor in the Bradburys moving from Waukegan to Arizona. There, he struck up a friendship with a youth who had an entire boxful of old AMAZING STORIES and WONDER STORIES and he borrowed and read them all. Bradbury also never tires of telling of his fascination with Edgar Rice Burroughs' tales of Tarzan and Mars at the age of 12, and how, lacking money, he pounded out his own sequels on a toy typewriter with all capital letters.

Two years later, in 1934, his family made its final move to Los Angeles. Richard Donovan, in his article *Morals From Mars* in THE REPORTER for June 26, 1951, refers to the Bradbury of this period as "a fat boy who wore spectacles and could not play football satisfactorily. Humiliated, he turned to writing."

A turning point in his life came in early September, 1937, when, while examining the books and magazines in Shep's Shop, a Los Angeles book store that catered to science fiction readers, he received an invitation from a member to visit the Los Angeles Chapter of the Science Fiction League. At the September 5, 1937, meeting held at the home of one of the members, he was handed the first issue of a club magazine titled IMAGINATION! The possibility that he might ac-

tually get something published in that amateur effort was the convincer. He joined at the October meeting.

Bradbury's first published story, *Hollerbochen's Dilemma*, appeared in the January, 1938, issue of IMAGINATION! It was scarcely a distinguished literary work; but its plot of a man who generates a tremendous amount of energy by "standing still in time" and blows himself and the city off the map when he resumes his normal flow, is repeated so closely in A. E. van Vogt's first Weapon Shop story, *The Seesaw*, published in ASTOUNDING SCIENCE-FICTION for July, 1941, as to raise a question.

This story was almost out of character for Bradbury at the time, who apparently played the role of the club clown. One of the members described him as "the funny man of the Los Angeles League. In other words, he is the Big Joke." Most of his published works during that period were pathetically inept attempts at humor, both fiction and non-fiction. Today, they are the despair of the Bradbury completist, having been published in obscure amateur mimeographed journals with titles like D'JOURNAL, FANTA-SCIENCE DIGEST, NOVA, MIKROS, FANTASY DIGEST, POLARIS and SWEETNESS AND LIGHT.

An amusing and surprisingly accurate description of Brad-

bury's physical appearance at that time was supplied by himself in the June-July, 1939, **FANTASY DIGEST**: "That horrid thing in the mirror has toddled through life wearing glasses, blue eyes, a frowsy hank of blondish brown hair, twin ears, hot and cold running drool, and a nose that would pass for a cabbage in a dim light. He has white teeth, his very own, and a reddish complexion (weaned on cat-sup, you know). He stands (or rather leans) to five feet and ten inches **not** counting the green familiar that rides around on his eyebrows on cool days and sings "Frankie and Johnnie."

Virtually every early personal description of teen-age Ray Bradbury by an acquaintance speaks of unfailing affability, puncture-proof good nature, constant buffoonery and self-effacement. He appeared a man without a tart opinion on any subject. The stark contrast with the fear-haunted, angry, sensitive and hurt Bradbury revealed in his later writings suggests a deliberate facade. A possible confirmation of this surmise rests in the appraisal of Bradbury, made by one of his closest early friends, T. Bruce Yerke, in a booklet entitled *Memoirs of a Superfluous Fan* published in December, 1943. "The feature which marked him among the members of the group was his

mad, insane, hackneyed humor," wrote Yerke, "but underneath his ribald and uncontrollable Bacchus . . . was a deep understanding of people and signs of the times."

THE Los Angeles club was a very good thing for Bradbury. Among its members were selling fantasy authors Henry Kuttner and Arthur K. Barnes, and later, Robert A. Heinlein and Leigh Brackett. When he graduated from high school in 1938 he seriously gave priority to the notion of becoming a writer and the local writing members and frequent visiting professional authors found Bradbury a veritable leech, insatiable in his quest for the formula to successful professional writing.

However, not only did professional sales elude the youthful Bradbury, but even among the amateur science fiction fan magazines, which rarely rejected anything, he received a surprisingly negative response. There was only one thing to do. In the early Summer of 1939, Ray Bradbury mimeographed his *own* periodical titled **FUTURIA FANTASIA**. The first issue featured a cover by Hannes Bok, who was then virtually unknown, and a story by Ray Bradbury under the pen name of Ron Reynolds. More significantly, most of the issue was devoted to promoting a move-

ment known as Technocracy, Inc.

The Technocratic masterminds had a theory that the American economic system would collapse by 1945. They were prepared to step in with an appointive hierarchy of scientists, who would run the country with completely scientific preciseness and infallibility. They estimated that under their system there would be the equivalent of \$20,000 annually for every individual in the country redeemable in energy certificates. People would work four hours a day, five days a week. The country would be split into 100 zones and an industrial complex allocated to take care of the needs of each zone.

Bradbury said then: "I think Technocracy combines all of the hopes and dreams of science fiction. We've been dreaming about it for years—now, in a short time it may become a reality."

Bradbury today is scored for his anti-scientific attitude. His fear of science, misused, is real and evident. This attitude was *not* present in 1939 when he idealistically forecast that a country run completely according to the dictates of a scientific technate was a good thing. The fact that there were no provisions for elections in this system did not bother him because he felt, at that time, that a "limited dictatorship" was desirable.

Within weeks after publishing the first issue of FUTURIA FANTASIA, Ray Bradbury attended The First World Science Fiction Convention held in New York over the July 4th weekend in 1939. On July 7th he went up to see Farnsworth Wright, the editor of WEIRD TALES, with a dual purpose. First to examine possibilities of selling to that magazine and, secondly, to show Wright samples of the artwork of Hannes Bok, whose specialty was a baroque style ideally suited for the weird tale. The latter mission was a complete success. Wright enthusiastically purchased Bok's work and Bradbury was the instrument of that artist's appearing on the professional scene.

From the long-range standpoint, the most important thing Bradbury accomplished during his New York visit was to make the acquaintanceship of Julius Schwartz. Schwartz was then the leading literary agent specializing in the placement of science fiction and fantasy. His roster of authors read like a who's who of the period. The Fall, 1939, issue of FUTURIA FANTASIA contained Ray Bradbury's story, *Pendulum*, which was published anonymously. Bradbury induced Henry Hasse, an enthusiast who had previously sold a number of science fiction stories on his own, to help him rewrite it. This

Schwartz dutifully peddled as a collaboration, hoping Hasse's reputation would ring up a sale.

The Summer of 1941 Julius Schwartz and popular science fiction writer Edmond Hamilton decided to rent an apartment together in Los Angeles for the months of July and August. Schwartz would vacation and Hamilton would pound the typewriter. The first afternoon, Schwartz strolled 50 yards from the apartment on Norton Street to where Norton intersected Olympic to be stopped by the call: "Paper, Mister!" He turned to discover the newsboy was Ray Bradbury! Bradbury sold newspapers every afternoon on that corner. It was his main source of income between the years 1938 and 1942.

BRADBURY was relentless. Before and after his newspaper stint he was everlastingly underfoot at the Schwartz-Hamilton apartment. The situation became all but impossible when on July 18, 1941, news arrived that *Pendulum* had been purchased for \$27.50 by SUPER SCIENCE STORIES. This story, which appeared in the November issue of that magazine, told of a scientist of the future, who in demonstrating a new discovery, accidentally kills two dozen of the world's leading savants. As punishment, he is imprisoned in a

giant swinging pendulum. The motion renders him almost immortal and he watches the centuries pass, ultimately to dissolve into dust when invaders from outer space stop the action of the pendulum. In both writing and plotting the story was *below* the minimum level of acceptability even for that period.

Credit for the discovery of Bradbury (despite the fact that he was paid for a short non-fiction bit in SCRIPT seven months earlier) belongs to Alden H. Norton, who had taken over the editorship of SUPER SCIENCE STORIES only a week previously from Fred Pohl. Norton went on to become Associate Publisher of Popular Publications.

Another collaboration with Henry Hasse, *Gabriel's Horn*, was going the rounds and would eventually sell to CAPTAIN FUTURE, but at the moment Bradbury's chief consideration was how to accomplish personal sale number two. He dug into the files of FUTURIA FANTASIA and in its fourth and final issue published in Summer, 1940, found *The Piper* under his pen name of Ron Reynolds. Back he went to the doorstep of Schwartz's apartment. It was a hot day and both of them sat down on the curb of the street, revising *The Piper* according to Schwartz's instruction. Whenever they took a break, Bradbury would have a

hamburger with a malted, the two food items that were the staples of his diet.

The Piper was the first sale Bradbury made on his own, and his first tale of Mars. As it appeared in THRILLING WONDER STORIES for February, 1943, it told of the last civilized Martian who lures a primitive race out of the hills, through music, to destroy the Jovians who are exploiting the planet. The original version in FUTURIA FANTASIA, while inferior, was much closer to the style Bradbury would eventually adopt. Instead of Jovians, the exploiters of Mars were Earthmen. The description of the Red Planet's cities is very close to *The Martian Chronicles*. This story pointedly reveals that in initially attempting to ape the methods of the selling writers, Bradbury was ill-advised. He would have made it quicker and better on his own.

Bradbury had no one to tell him this. He rented an office with a typewriter and a desk and eight hours a day ground out stories, none of which sold. He eventually burned three million words of manuscript and in desperation detoured science fiction and tried to crack WEIRD TALES. He enlisted the help of Henry Kuttner, who actually wrote the last 200 words of *The Candle*. This very weak tale of the death wish and retribution was bought by

WEIRD TALES for \$25 and published in its November, 1942, issue. *Promotion to Satellite*, a short story of an Italian who dies in space while saving crew members of his ship and whose body is permitted to become a satellite around the earth as a monument to his heroism, was the next sale. This appeared in THRILLING WONDER STORIES for Fall, 1943. This story almost came off and showed early traces of the later, more successful, Bradbury.

UP to now, Bradbury had been trying to imitate other science fiction writers. In *The Wind* in WEIRD TALES, March, 1943, he chose as his model Ernest Hemingway; the bulk of a longish short story of a man threatened and finally absorbed by the wind is related in the trim dialogue so characteristic of the master. Hemingway remained a major stylistic influence thereafter. The May, 1943 issue of WEIRD TALES contained his short story *The Crowd*, clearly a variant of Edgar Allan Poe's *Man of the Crowd*, dealing with those people who seem to spring from nowhere when an accident occurs.

The Scythe, appearing in WEIRD TALES for July, 1943, was a chilling allegory of the Grim Reaper, but Bradbury really rang the bell with *The Ducker* in the November, 1953, issue. The story of Johnny Choir, who

thought that real war was a children's game and came through unscathed, was Bradbury's first tapping of the rich mine of childhood memories that was to make him famous. The reader response was so spontaneous that a sequel featuring the same character, *Bang! You're Dead*, appeared in the September, 1944, WEIRD TALES; the magazine requested and ran his biography, and Bradbury was off to his first big reputation.

The slow, discouraging progress in selling science fiction forced him to redouble his efforts on fantasy. The top market in the science fiction world of 1942 was ASTOUNDING SCIENCE-FICTION, and its editor consistently got first look at every Bradbury story and just as consistently turned them down. He finally invested \$45 in a near-fantasy submitted as *Everything Instead of Something* which was published in the September, 1943, ASTOUNDING SCIENCE-FICTION as *Doodad*. The story, a transparent take-off on van Vogt's Weapon Shop idea, concerned a store that sold gadgets from other time periods capable of doing virtually anything. The hero uses them to defeat a gangster in as pitiful a piece of fantasy as ever appeared in ASTOUNDING.

ASTOUNDING SCIENCE-FICTION had a companion magazine, UNKNOWN FANTASY FICTION, which

specialized in off-beat fantasy. Bradbury succeeded in selling that magazine one of his weird tales. Ironically, the publication collapsed before the story could be published and *The Emissary* eventually appeared in Bradbury's first hard-cover collection *Dark Carnival*, published by Arkham House in 1947. The contrast in quality to *Doodad* was incredible. *The Emissary*, the story of an invalided boy whose dog regularly brought a kindly young woman to visit, has the pet succeed one last time in his mission after the woman is dead and buried. It was a minor terror classic.

So, reluctantly, Bradbury channeled most of his energies into the weird, horrible and terrifying. Drawing primarily from memories of childhood, he sold a continuous stream of outré, grotesque, bizarre tales with titles like *The Sea Shell*, *Reunion*, *The Lake*, *The Jar*, *The Poems*, *The Tombstone* and, probably most memorable of all, *The Night*, a magnificently realistic portrayal of gradually rising tension and fear engendered by first waiting and then searching for a child out too late and overdue.

One such attempt, *The Long Night*, fell into the category of a detective story and Julius Schwartz submitted it to Popular Publications' NEW DETECTIVE. On buying it, editor W. Ryerson

Johnson told Schwartz: "This Bradbury is beyond question the most promising writer I have ever read. He's going places and let me see more."

Schwartz passed this message on to Bradbury who began alternating his writing of weird tales with detective stories, eventually selling nearly a score of them to DETECTIVE TALES, DETECTIVE FICTION, DETECTIVE BOOK MAGAZINE, DIME MYSTERY and NEW DETECTIVE. One of them, *Wake for the Dead*, in the September, 1947, DIME MYSTERY was science fiction, built around the concept of a completely automatic coffin. Another, *The Small Assassin*, concerning a baby that murders both of its parents, has become a Bradbury classic.

OCCASIONAL Bradbury science fiction appeared. *I, Rocket* in the May, 1944, AMAZING STORIES was an effective interplanetary adventure told from the viewpoint of the rocket ship. A little earlier, *King of the Grey Spaces* in the December, 1943, FAMOUS FANTASTIC MYSTERIES, proved a sensitive presentation of the attitudes of a young boy trained, and finally selected, from among many, to go to space.

The most dependable market for Bradbury science fiction was the action-adventure pulp PLANET STORIES. At first he conformed to adventure formula,

even doing a revival of Robert E. Howard's Conan in *Lorelei of the Red Mist* in collaboration with Leigh Brackett. The notion of a morgue space ship, to pick up bodies after interplanetary wars, was unique, but his use of the theme in two stories, *Morgue Ship* and *Lazarus, Come Forth* was indistinguished.

Then it happened. A story submitted to PLANET as *The Family Outing* appeared in the Summer, 1946, issue of that magazine as *The Million Year Picnic*. In cash it was worth only \$32, but in reader reaction incalculably more. This story of the last family from earth, sailing down a river on Mars to become the first of a new race of Martians, was not only the first of his *Martian Chronicle* stories to see print, but one of the best.

Far more remarkable, but almost forgotten because he has never permitted it to be reprinted, was *The Creatures That Time Forgot*. This was Bradbury's second longest story, nearly 22,000 words in length, and had all the earmarks of an epic. Somewhere, somehow, the 26-year-old Ray Bradbury had been confronted by a "realization of mortality." In this story, which he originally titled *Eight Day World*, he envisaged a group of humans, stranded on a radioactive planet, where the entire processes of human growth and

life were speeded up to only eight days. "Birth was quick as a knife," wrote Bradbury. "Childhood was over in a flash. Adolescence was a sheet of lightning. Manhood was a dream, maturity a myth, old age an inescapably quick reality, death a swift certainty."

Bradbury's friend, Edmond Hamilton, based a short story, *The Ephemerae* (ASTOUNDING SCIENCE-FICTION, for December, 1958) on a human race whose life-span was but 70 days, but even if this was the spark that ignited *The Creatures That Time Forgot*, no apologies were in order. At times, the efforts of the proponents to fight their way to a space ship that offers escape and a normal life before they die of old age descends to pulp action level, but the allegory is so powerful that the overall effect is memorable.

The year previous, Bradbury's hopes had been raised by the sale of a non-fantasy, *The Big Black and White Game* to the AMERICAN MERCURY. Then published by Lawrence Spivak, the AMERICAN MERCURY was a prestige magazine and though its rates were very low compared to most other general magazines, they were the highest Bradbury had ever received. Again, drawing from childhood, Bradbury attempted a mainstream theme of interracial tension at a ball

game. This story was selected for inclusion in Martha Foley's *The Best Short Stories of 1946*. This, together with the power displayed in Bradbury's science fiction was an augury. The April 13, 1946, issue of COLLIER'S carried his short story, *One Timeless Spring*, and the April, 1946, issue of CHARM, *The Miracles of Jamie*.

MADEMOISELLE published *The Invisible Boy*, a touching tale of a witch woman trying to conquer loneliness with spells that never worked, in its November, 1945 issue. The same magazine rang all bells with *Homecoming* in its October, 1946, number, it was selected for inclusion in the O. Henry Memorial Award Prize Stories for 1947. *Homecoming* relates the gathering of a family of witches, vampires, and dybbuks, as well as the teen-age boy among them who has been born human and is patronized by his more "fortunate" relatives. Here is expressed the yearning of children for some of the magical attributes of the creatures of superstition and fancy, brilliantly defined, with the hint that Bradbury's intimation of mortality was derived in his early youth from folklore.

UNDERRATED is *Defense Mech* in PLANET STORIES for Spring, 1946, which really is an early try and a nearly successful

one at the theme made famous in *Mars is Heaven*, except that here a single mentally disturbed space traveler suffers from the hallucination that he is viewing earth scenes on Mars. *Zero Hour*, in PLANET STORIES for Fall, 1947, was billed by the editors as "one of the best science fiction stories we have ever seen. Perhaps you will think it the *best!*" It is another classic in the tradition of *Thus I Refute Beelzy* by John Collier and *Mimsy Were the Borogoves* by Henry Kuttner, reflecting the gulf in understanding between parents and children and the resultant antagonism.

Bradbury had so far rarely received more than a cent a word for his stories; but now the rate on the science fiction climbed to two cents a word. PLANET STORIES paid that for *Pillar of Fire*, a total of \$250 for one of Bradbury's strangest tales. A zombie climbs from its coffin, the last dead man in a world that burns all its dead. Here we learn of the Mars of *The Martian Chronicles*. Here, too, the books have been burned and the burning of this living dead man will blot out the last memories of Edgar Allan Poe, Ambrose Bierce, H. P. Lovecraft, Nathaniel Hawthorne, and other masters of fantasy. When the authorities finally apprehend and burn this last dead man, *Pillar of Fire* becomes an enthralling

prelude to *The Exiles* (THE MAGAZINE OF FANTASY AND SCIENCE FICTION, Winter-Spring, 1950) where ghosts of great writers of the past, hiding on Mars, are expunged when the last memory of them is gone.

Mars Is Heaven followed in PLANET STORIES for Fall, 1948. A possible influence on Bradbury here was Stanley G. Weinbaum's *Martian Odyssey*, where a predatory plant conjures up visions of the most desired objects of its prey in order to lure them to their deaths. Earthmen land on Mars to find everything just like a midwestern town, down to brass band. They find their dead relatives waiting to welcome them, and then, while asleep in their memories of childhood, they are killed. Certainly one of the most original methods of repulsing an interplanetary invasion ever conceived.

In May, 1947, Ray Bradbury's first hard-covered collection, *Dark Carnival*, made up primarily of his weird tales, was published by Arkham House. Bradbury sent an inscribed copy to his agent Julius Schwartz which read: "For Julie, in fond remembrances of Norton Street—"The Piper"—The Moon festival in Chinatown—Li'l Abner—"Are you Kidding?"—That old song, circa 1941: "Daddy"—The beach—The Burlesque—And then New York and George Brunis—God,

what a beautiful night!—and because you sold almost every story in this book for me—With luff, from Ray Bradbury.”

Six months later, when Schwartz sold *The Black Ferris* to WEIRD TALES on Jan. 2, 1948, their business relationship was ended. Schwartz was a specialist in science fiction only. He wrote Bradbury and candidly told him that as an agent he had taken him as far as he was capable. From this point on he would be retarding, not helping to advance his client.

ON HIS own, Bradbury was already clicking with THE NEW YORKER and HARPER'S. A few years later CORONET would condense *Mars is Heaven* and ESQUIRE would reprint it in full. ESQUIRE would also reprint *The Earth Men*, *The Spring Night*, and *Usher II*, all from the science fiction pulps. Bradbury had long been selling below his market. Bradbury could no longer be ignored. Newspaper and magazine critics were generous, but in the fantasy and science fiction field reaction was mixed.

It was common for critics of Bradbury to state that all he had to sell was emotion. This is considerably removed from the truth, which reveals he effected some permanent changes in the science fiction field. Richard Matheson was unquestionably in-

fluenced in the style, mood and approach of his stories by Bradbury. His most famous story, *Born of Man and Woman*, is a variant on Bradbury's use of childhood horror. Judith Merrill, who established her reputation with *That Only A Mother*, a story of a mother who can see nothing wrong with her mutated, limbless child, published in ASTOUNDING SCIENCE-FICTION for June, 1948, certainly owes some inspiration to Bradbury, whose touching vignette, *The Shape of Things* in THRILLING WONDER STORIES for February, 1948, deals with a woman who can see nothing wrong in her child, born in the shape of a triangle. James Blish, who went on to win a Hugo with *A Case of Conscience*, a novel of the dilemma of a priest on the planet Venus, where creatures exist without original sin, should bow respectfully in the direction of *In This Sign* (*The Fire Balloons*) published originally in IMAGINATION, April, 1951, which tells of priests who discover Martians without original sin.

Bradbury has won several law suits, including one directed against an hour-long television show, for appropriating ideas from his works. Obviously, there must be something more substantial than emotion and mood borrowed. Most significant of all, John Campbell's ASTOUNDING SCIENCE FICTION got first look at

most of the major Bradbury stories, including *Mars Is Heaven*, *Zero Hour*, *Pillar of Fire*, *The Million Year Picnic*, and *The Earth Men*—and rejected them all as not being the right type. Now, it runs precisely that sort of story. Example: see *The First One*, by Herbert D. Kastle in the July, 1961, issue, dealing with the aloneness of the first man back from Mars and the gap he finds between his family and himself.

The Martian Chronicles (1950) and the collection *The Illustrated Man* (1951) gave Bradbury mainstream acceptance for his science fiction. The question has frequently been raised as to why the highly original and skillful tales in *Dark Carnival* and later, in *The October Country*, failed to gain similar acclaim. The answer is that there were and are many extraordinarily brilliant practitioners in the field of the off-trail, horror and supernatural. Men and women with superb command of the language and remarkable originality: John Collier, Roald Dahl, Edgar Allan Poe, Ambrose Bierce, A. E. Coppard, Algernon Blackwood, Theodore Sturgeon, Walter de la Mare, Saki, M. R. James, W. F. Harvey, E. F. Benson, May Sinclair, and Lord Dunsany only begin the Honor Roll. Bradbury can stand above a few of them, with most of them, and below some of them;

but in that kind of competition he cannot lead.

THE reverse is true in science fiction. There, his ideas appear strikingly original and his style is scintillating. Stylistically, few match him, and the uniqueness of a story of Mars or Venus related in the contrasting literary rhythms of Hemingway and Thomas Wolfe is enough to fascinate any critic.

Mainstream themes and mainstream writing in a science fiction setting are Bradbury's contributions to fiction writing. In this he is singularly original, and magazines like COLLIER's did not hesitate to run his minor masterpiece *There Will Come Soft Rains*, graphically depicting atomic disaster by indirection; or *To the Future*, the attempt of a couple to escape from a 1984-type future into the relative freedom of modern Mexico City. In this vein THE SATURDAY EVENING POST will feature *The World The Children Made*, concerning a playroom in three-dimensional TV whose pictures resolve into fourth dimensional reality, or *The Beast from 20,000 Fathoms*, where a prehistoric monster rises from his sleep in the muck of the Atlantic to respond to the notes of a foghorn.

One charge brought against Bradbury is true: that his stories raise issues on purely emotional

levels and offer no supporting logic for the stand. It is often difficult to determine which issues he artificially conjures for the sake of the story, and on which issues he is sincere.

This problem was resolved by the publication in book form of *Fahrenheit 451*, the closest Bradbury has ever come to writing a novel. This story presents in detail the basis of Bradbury's grievances. Because of this, the story of a future America where the job of a Fireman is not to put out fires but to burn books reads a bit slower than Bradbury's shorter works, but it is by all odds one of his best and most revealing. Reading between the lines, we learn that Bradbury's use of racial prejudice in *'Way In The Middle of the Air* and its sequel, *The Other Foot*, is merely contrived and not heartfelt, since in *Fahrenheit 451* he rails against the *minorities* as a major factor in the censorship of newspapers, books, magazines, moving pictures, radio and television, a subject upon which he is most vehement.

It offers scarcely a word on religion—which was the core of *In This Sign* and *The Man*, so we may reasonably conclude that his use of this material was for impact value.

It tells us *why* he fears science, but does not tell us *when* he came to fear science. A good the-

ory is that it happened this way. Few things affected Ray Bradbury as traumatically as the Nazi book-burnings. His wrath and indignation at this action, his fear that civilization is today "burning" books—if not literally then through neglect—recurs constantly in *Fahrenheit 451*. A psychologist might say that since writing offered Bradbury his one hope of immortality, the destruction or loss of public interest in the vehicles necessary to convey his thoughts virtually threatens his soul. This very idea is the theme of *The Exiles*, where the spirits of great authors of the past vanish one by one, as the final copies of their books are burned or the last person who remembers them dies. In 1942 Technocracy, Inc., placed advertisements in 100 American newspapers demanding an end to U.S. aid to allies fighting Nazi Germany.

The technocracy which Ray Bradbury has so idealistically supported was now allied with the burner of books. Science was after all merely the instrument, not the savior, of mankind. In the wrong hands it could destroy the world.

Bradbury is today an important writer on the American scene, but his emphasis on science fiction seems to be a thing of the past. His current output is not even mainstream; it is con-

formist, whether done for *Playboy* or a literary journal. It is good, skillful work; but like his weird material, it is bracketed by legions of other good, skillful writers.

When a new book of his is reviewed, inevitably the few items of science fiction are singled out and most of the rest given only a

polite nod. The only books of Bradbury's that the future will not "burn" are those that hew closest to the style of *The Martian Chronicles*. His "messages" score only when clothed in the vestments of science. H. G. Wells and Jules Verne both had to learn that lesson. It is now Bradbury's turn.

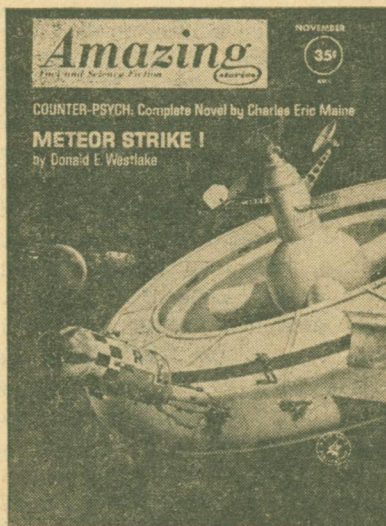
THE END

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the Hungry Guinea-Pig

By MILES J. BREUER, M.D.

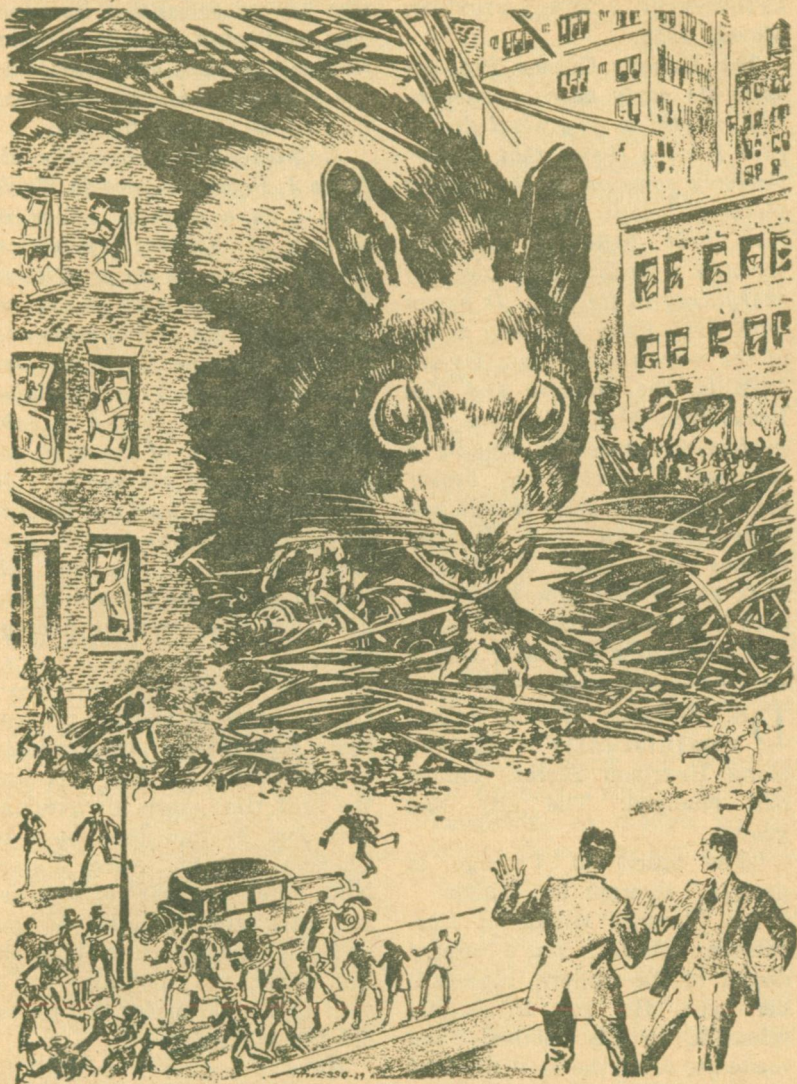
Introduction by Sam Moskowitz

YOUNGER readers are frequently puzzled to see the name of Miles J. Breuer, M.D. turn up in modern anthologies of science fiction as distinguished as *Fantasia Mathematica*, edited by Clifton Fadiman; *Science Fiction Galaxy* and *Big Book of Science Fiction* both edited by Groff Conklin. The name of David H. Keller, M.D. is still known but Miles J. Breuer, M.D., introduced to the readers of *AMAZING STORIES* the same year, 1928, is dissolving into undeserved obscurity. His novel *Paradise and Iron* which appeared in the Summer, 1930 issue of *AMAZING STORIES QUARTERLY* is perhaps the single greatest work on the perils to mankind of automation and thinking machines to appear in the science fiction magazines, yet, by some fluke, it has been overlooked as a candidate for book publication.

Among his short stories there are certainly enough unusual ones to make a collection. His

first, Appendix and the Spectacles put his medical knowledge on display before the readers of the December, 1928 *AMAZING STORIES* in a story based on operating through the fourth dimension so as to eliminate the necessity for an incision in the body wall. One of the earliest stories based on semantics, a theme which helped to make A. E. van Vogt's *World of A* so successful was Breuer's ingenious *Gostak* and the *Doshes* which appeared in *AMAZING STORIES* for March, 1930. In *The Fitzgerald Contraction* in *SCIENCE WONDER STORIES*, January, 1930, he may have been the first author to base a story on the now commonly accepted notion, confirmed by the time dilatation effect observed on mesons, that time passes slower for objects approaching the speed of light than it does for those stationary. Modern readers are familiar with the dramatic and poignant use of the theme made by L. Ron Hubbard in his near-classic *To the Stars*, which ran

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From the flattened wreckage there gazed out at the rapidly growing crowd across the street, a pair of immense, pinkish brown eyes . . . set in a head that looked somewhat like that of an enormously magnified rabbit.

as a two-part novel beginning in ASTOUNDING SCIENCE-FICTION, March, 1950.

The Hungry Guinea Pig, despite its early date of publication, is still a very novel departure from a theme that is particularly common in the motion pictures today: the giant creature that bulldozes its way through a modern city, toppling everything in its path. It began with King Kong and only a few of the more recent examples are Godzilla, the Monster and The Beast From 20,000 Fathoms. The preferred menace is usually a resurrected prehistoric beast; something inherently savage and destructive. In The Hungry Guinea Pig, Miles J. Breuer, M.D. shows that inborn viciousness is no prerequisite of danger in an oversized creature; that a

gentle, timid animal, with no motive beyond satisfying its appetite, may bring as much devastation as the most evil denizen of the past yet conjured—and may be just as difficult to stop.

A Chicagoan by birth, the late Miles J. Breuer, served in World War I as a medical officer in charge of fighting epidemics. He eventually set up practice in Lincoln, Nebraska as an internist, specializing in diagnosis and internal medicine. He maintained a massive personal research laboratory and contributed a substantial number of research papers concerning his specialty to the medical publications. Science fiction was a hobby that he particularly enjoyed, dividing his limited spare time between it and his other love, amateur photography.

DR. Clarence Hinkle walked reminiscently westward along Harrison Street. Things had changed. The city had grown.

"The spirit of Chicago is growth," thought Dr. Hinkle.

Dr. Clarence Hinkle of Dorchester, Nebraska, was a country doctor of the modern, high-caliber type. He was thoroughly scientific in his methods and made use of all the facilities that modern science offers, in taking care of his prosperous farmer patients. He kept up with scien-

tific progress by visiting conventions and taking post-graduate courses regularly. But this was the first time since his graduation that he had been back to Chicago and his Alma Mater. Now, after ten years of successful, satisfactory practice, he was on a pilgrimage back to old Rush. For study, yes; but also for a visit to the old places and to see old friends again.

He was especially anxious to see Parmenter. He and Parmenter had roomed together for four years, two on the South Side at

the University of Chicago, and two on the West Side at Rush, in the center of the greatest aggregation of medical colleges and hospitals within the area of a square mile known to the world. Parmenter had been brilliant and eccentric. As a student he had done astonishing things in biochemistry. He had made a wild and brilliant record in the war. Hinkle had kept up a desultory correspondence with him, which had conveyed hints of some research of Parmenter's; something amazing, but without details of information. Parmenter's work had so impressed the University of Chicago that they had built him a laboratory and dispensary to work in.

Dr. Hinkle walked up Harrison Street looking for it. The huge bulk of the Cook County Hospital loomed ahead of him. Thousands of Rush graduates all over America will appreciate how he felt when he saw the old corner at Harrison and Congress Streets, with the venerable and historic building gone, and a trim, business-like new one in its place. It seemed that sacred memories and irreplaceable traditions had been desecrated. But, progress must go on. However, the old "P. & S." was also replaced by a great maze of new buildings. And there ahead was a sign: THE PARMENTER INSTITUTE. So, they had even named the

clinic after him! Indeed, he must have done something.

He stopped a moment to look the building over. Two trucks piled high with heads of cabbage drew up before the side entrance. The drivers conversed as they unloaded the cabbage.

"Yesterday," Dr. Hinkle overheard one of them say, "I delivered a load of freshly cut alfalfa here. You'd think they had a lot of big animals. Funny thing for this part of town. And tomorrow we'll be bringing more stuff; wait and see."

They carried basketloads of cabbage-heads up the short flight of stairs, and the porter of the building always opened the door and took the baskets from them.

"Listen!" whispered one of the truck-drivers to the porter, catching him confidentially by the shoulder; "what's all these loads of green stuff for?"

"For feeding our experimental animals," replied the porter haughtily, as though he knew things they were not competent to understand.

"What sort of animals?" asked the truck-driver, looking doubtfully at the building, whose windows were the same as those of the others with their small rooms.

"Guinea-pigs," replied the porter.

"Guinea-pigs," The truck-drivers looked blankly at each

other. "What are guinea-pigs?"

"Hm!" snorted the porter contemptuously. "Don't know what guinea-pigs are!" He saw them every day. "A guinea-pig is an animal like a rabbit; no, smaller—half as big. It looks something like a rabbit and something like a rat."

"Aw!" growled the truck-driver. "He stringin' us."

"No," replied his companion. "That's true. I saw them when I was in the hospital. The doctors use them for speerments."

An inner door opened and a white-clad attendant stood looking out of it into the hall. For a while, as the door stood open, they heard a number of short, low-pitched, whistle-like notes. Then another hand slammed the door shut, and again the hall was dark and silent. To Dr. Hinkle's mind, the sound had no resemblance whatever to the squealing of guinea-pigs. The truck-drivers continued to carry cabbage and to tarry inquisitively.

Dr. Hinkle walked briskly up the front steps of the Institute, and into the office. He handed his card to the girl at the information desk, stating that he had an appointment with Dr. Parmenter.

"The doctor said you were to come into the office and wait for him," she said, showing him into an adjoining room.

IN Parmenter's office, a large desk was piled high with neatly arranged stacks of books, papers, and chemicals, covered almost all the wall space, except where it was occupied by a great steel safe. Since there was also a safe in the business office through which he had passed, Dr. Hinkle concluded that this one held, not money, but, rather, records of tremendous importance, or some sort of chemical preparation that might be dangerous in the hands of the wrong people. He sat down and waited, his eyes flitting back and forth among the titles of the medical, chemical, and biological publications.

As he sat in his chair, he could see through the open door down a long hallway. At the end of the hallway was another door; a curious door that seemed to be made of heavy planks placed horizontally, and held together with iron straps. This door was slowly pushed open, an interne emerged into the hallway, and with considerable effort tugged the door shut again and turned a heavy bolt. While it was open, Dr. Hinkle heard several more of those short, reverberating, fluty notes, like the low pipes of an organ. They were accompanied by heavy, dragging sounds, as of something tremendously heavy scraping on the door with little short scrapes. Another interne

came down the hall, and as the two met, the first one said:

"This can't go on much longer. It's got to be stopped."

The second one laughed a harsh, mirthless laugh.

"I guess we'd have stopped it already, if somebody would tell us how."

The two went back through the heavy door. Dr. Hinkle craned his neck to get a glimpse through it. In the vast half-gloom through the door, he caught a fleeting glance at a huge curved back and flanks, covered with long, straight brown hair.

"A cow? Or a bear?" he wondered in astonishment. "It's bigger than a couple of both. What in—"

Dr. Parmenter walked briskly out of a door down the hall, and seeing Hinkle in his room, hastened in. Dr. Parmenter had a worried look about him; a wrinkle in his forehead that he couldn't seem to smooth out, a wrinkle that betrayed some sort of preying anxiety. He looked much older than his country confrère, though the quondam roommates were really almost of an age. They stared wildly at each other, each surprised at the changes in the other. They gripped hands in silence for some minutes.

"Well, so this is what you're up to!" Hinkle exclaimed.

"You look like a million dollars!" Parmenter congratulated.

They sat and chatted small stuff for a while.

"You do look prosperous," Parmenter insisted. "You must be doing well."

"Oh, I've put aside a few thousand. Ten more years like these, and I could retire in modest independence."

Parmenter sighed.

"I can't seem to get ahead much financially." He paused wistfully. "You have a family?"

Hinkle nodded.

"Two boys and a girl."

"Happy dog." Parmenter had a far-away look in his eyes.

Hinkle was also looking a little thoughtful.

"The medical drudge, the traveler over country roads, the custodian of colds and stomach-aches wishes to inquire," he said earnestly, "if there is not happiness in being known all over North America; in having papers published in every scientific journal; in being invited to great conventions as an honored guest; in having a dispensary built for you and called after you—a young fellow like you? You make me feel like a moron."

Parmenter's face warmed up a little with pride.

"And a colonel during the war!" Hinkle continued. "Do you know, I'm famous back home among the common folks just because I can say I used to room with you?"

Parmenter was silent but grateful. Finally he said:

"So you got into the fracas in France too? How did you go?"

"Oh," replied Hinkle, as though he disliked to admit it, "plodding along in a field-hospital unit. But you—" his voice rose in surprise again—"a medical man! How did you happen to go as an artillery officer. I'd think you'd want to give your country the benefit of your scientific training."

PARMENTER sat straight up in his chair. His face livened up with interest.

"Scientific training!" he exclaimed. "Maybe you think you don't need scientific training in the artillery. I dare say I made better use of what scientific ability I may have, in the artillery than I ever could have done as a mere medical officer. Wasn't it so in this war, that only one medical officer out of a thousand had any opportunity to do scientific work? The scientific training I got in the artillery corps has helped me to accomplish what I've done since the war."

Hinkle stared incredulously.

"If you don't think it takes science," Parmenter said, "to yank a four-ton gun into place in the middle of a field, and put a shell on a spot the size of a door ten miles away at the third shot—you've got another guess com-

ing. That takes real figuring, and real accuracy in working. To come up into position one night, and by the next night to have the country for twenty miles ahead plotted into numbered squares, into any one of which you can drop a shell instantly, within ten seconds of a signal from an airplane observer—the whole medical department didn't use as much science as did our little battery of heavy field artillery. That was a glorious kick-up—"

He stopped and turned his head, as several fluty whistles came faintly from within the building.

"But this is just as exciting," he continued when the errie sound had ceased. He smiled at Hinkle's look of amazed inquiry.

"I guess I'd better show you around," he said. "I've got something here that hasn't been published yet."

"I got a peek at some ungodly thing a while ago," Hinkle remarked; "What is it—a buffalo? No; it's three times as big. A dinosaur? I never heard of any animal that would fit what I saw. Is that what makes the tooting?"

Parmenter stood enjoying his friend's amazement.

"Perhaps I'd better prepare you for the sight first. I can explain briefly in a few moments. A few years ago I got interested in ductless glands and internal

secretions, and my interest eventually narrowed down to two of them about which the least is definitely known; the pituitary and the pineal bodies. I've done a lot of work on these two little brain-glands and written a lot about them. Both of them are intimately concerned in body growth. You will recollect that in the pathological condition known as *acromegaly*, in which there is an excess of pituitary secretion supplied to the body, the limbs grow long, and tall giants are produced; and you know how stunted the individual remains in cases where the pituitary body fails to secrete adequately. Perhaps you have also followed McCord's experiments: he fed chicks with pineal glands from cattle, and they grew to three or four times the size of normal birds. Then, a couple of workers in California separated from the pituitary body a substance which they called *tethelin*, and which when injected into mice, doubled their growth.

"I repeated and confirmed their work, and made large quantities of *tethelin*. The fact impressed me that neither the pineal experiments alone nor the pituitary experiments alone produced a well-balanced increase in size of the experimental animals. I obtained the active principle of the pineal body, which I took the liberty of naming *physein*; I got it

by four-day extraction with ether in the Soxhlet apparatus and recrystallization from acetone. Man, you should have seen the baskets and baskets of pituitaries and pineals from the stockyards, and all the ether and acetone we soaked. But, after all the dirty work, the half dozen bottles of gray powder that we got gave us a lot of satisfaction.

"Of course we injected the stuff into guinea-pigs. The guinea-pig is always the victim. At first we used six; and six controls which received none of the *tethelin-physein* solution. But we soon discarded the controls, for the injected animals grew like the rising of the mercury in a thermometer. They grew so fast that we had to kill five of them when they were as big as dogs, for fear that we could not feed them. This one we kept in order to ascertain the limit of size to which it would grow. Now we have had it six months, and it is as big as—well, you'll see. It is becoming difficult to feed, and it's a rough clumsy beast. I'd get rid of it, if I knew how—"

He was interrupted by a terrific hubbub from within the building. The whole structure shook, and there was a vast ripping, tearing. Crash after crash rent the air, followed by hollow rumbles and reverberations.

Dr. Parmenter dashed to the door and looked down the hall-

way. There were great cracks in the plaster, and chunks of the ceiling were raining down to the floor. The door at the end of the hall hung loose, revealing beyond it, not the semi-gloom of a big room, but the bright daylight of outdoors; just as though a piece of the building had been torn off. A huge rattling, banging din was going on, with clouds of dust filling the air.

He started down the hall, but a shower of bricks and plaster through the wrecked doorway deterred him. Seizing Dr. Hinkle's arm, he dashed out to the street, dragging the latter with him. Hinkle was puzzled; Parmenter was pale and looked scared, but seemed to know what was going on.

OUT in the street, people stood struck motionless in the midst of their busy traffic. Fascinated, like a bird watching a serpent, they stood glued to the ground, their eyes turned toward the Institute. A moment ago the business of Harrison Street had been going monotonously along, just as it had gone for a couple of score of years. Suddenly two or three people had stopped. Some sort of queer things had appeared in a window of the Institute, horrible looking objects, as though a monkey had jumped up on the sill. But no, the pink things were not arms and legs;

each had a single huge claw at the end of it. The whole thing looked like an enormous rat's paw. The group of astonished people standing and staring at it increased momentarily.

Then the brick wall bulged outwards, and a section of it as big as a room fell out of the ground in a mass of debris. A vast brown back appeared in the opening, and the thing's clumsy scratching threw layers of brick wall across the street. The enormous animal rolled out and disappeared behind the three-story signboards in the adjoining empty lot.

Dr. Hinkle and Dr. Parmenter ran across the street to watch. There was a huge commotion behind the signboards; then with a crashing of breaking wood the whole structure of signboards went over. There were screams of people on the sidewalk who were caught beneath the falling mass, and the tinkle of glass from smashed automobile windshields. From over the flattened wreckage there gazed out at the rapidly growing crowd across the street a pair of immense, pinkish-brown eyes. They were set in a head that looked somewhat like that of an enormously magnified rabbit, though it was held down close to the ground. Behind it arched a great brown back, higher than the second-story windows, covered with

long, straight brown hair, with black and white stripes and spots.

The creature looked around, jerking its head first one way and then another, apparently very much frightened. Then it moved forward a step to the accompaniment of crackling timber. The crowd surged away, and disappeared frantically into buildings and around blocks, as the animal slowly started toward it. Dr. Hinkle felt a sinking sensation within him as he realized that there were injured people on the sidewalk under that mass of wreckage that crunched and crumpled under the animal's huge weight. Everywhere, windows were filled with heads. In the Institute, the undamaged windows contained white-clad doctors and nurses. In the next block, an elevated train passed with a hollow, rumbling roar, and the giant guinea-pig crouched down and trembled in fear.

Then it ran out into the street with short, quick steps. One could get some idea of its size from the reports of the spectators, who stated that there was barely room in the street for it to turn around in. It had started across the street, and in its efforts to get loose it caught the odor of some scraps left behind at the unloading of the cabbage trucks, for it suddenly began to turn around. Its paw caught in

the window of a flat across the street, and in its efforts to get loose it wrecked a side of the building. Beds, refrigerators, and gas-stoves hung out in the open air. The animal seemed very much frightened.

Dr. Hinkle and Dr. Parmenter had been carried by the crowd to the solid shelter of the Cook County receiving-ward. People began to sense that the thing was dangerous, and scattered precipitately away from the scene of excitement. An Italian fruit vendor was pushing his cart westward along Harrison Street. The animal smelled the fruit and immediately became very much excited. It turned this way and that, but always there were buildings in its way. Finally it stepped up on the roof of a two-story flat on the corner. The roof caved in, and the screams of women were heard from within. In its effort to extricate itself, it made a wreck of the building. Then it hastened down a cross street in pursuit of the fruit cart.

The Italian heard its approach and stopped; he stood paralyzed by fear. The guinea-pig never saw him at all; it leaped for the fruit and one accidental blow of its paw knocked him over and crushed him flat. Only a bloody, smeary, shapeless mass on the street remained to tell the tale. Parmenter, already pale and

trembling, shrank back as the Italian screamed and raised his hands above his head, carried down by the giant paw. Parmenter's eyes had a cowed, beaten look in them.

THE fruit on the cart made a scant mouthful for the guinea-pig. It chewed very rapidly, with a side-to-side movement of its jaw. When it raised its head, its bare lower lip was visible, pale pink, and below it a group of short, white whiskers. The grinding of its teeth was audible for a block. Another train thundered along on the elevated railway, its windows crowded with curious heads. The guinea-pig became frightened again, and ran swiftly westward along Harrison Street. As it ran, its feet moved swiftly beneath it, while its body was carried along smoothly rocking, as though it were on wheels. It ran very swiftly, more swiftly than the automobiles that tried to get away from it; and the people along the street had no time to get out of the way. First a child on a tricycle was swept away, and then two high-school girls disappeared under it; and when it had passed, it left behind dark smudges, as when an automobile runs over a bird. It ran three blocks west, eating up all the potatoes and vegetables, baskets and all, in front of a grocery

store, and then turned north. Hinkle and Parmenter lost sight of it, noting a car filled with armed policemen in pursuit of it.

Parmenter's nerves were indeed shaken. He stared straight ahead of him and walked along like a blind man. Hinkle had to guide him and take care of him as though he were an invalid. Parmenter felt himself a murderer. All of these deaths were his fault, due directly to his efforts. Despite the fact that he was half paralyzed with remorse, he persisted in trying to follow the animal with a desperate anxiety, as though in hopes that he could yet do something to right the wrong. For a while he led Hinkle around aimlessly.

Then they heard the sound of the firing of guns, and breaking into a run, came around the block into Jefferson Square, a small, green park a couple of blocks area. There the guinea-pig was eating the shrubbery, tearing up great bundles of it with its sharp teeth. It smelled hungrily at the green grass, but was unable to get hold of the short growth with its large teeth. The bandstand and the bridge across the pond were wrecked to fragments. The police were shooting at the animal till it sounded like a battle, but it was without effect. Either its hide was so thick that the bullets did not penetrate, or else the mass of

bullets was so small that they sank into its tissues to no purpose. Once they must have struck it in a sensitive spot, for it suddenly scratched itself with a hind leg, and then went on chewing shrubbery. The police crept up closer and kept on firing; then all of a sudden the guinea-pig turned around and sped up the street like lightning. Before the police recollected themselves, it was out of sight, and the street presented a vista of overturned Fords, smashed trucks, a street-car off the rails and crowded against a building, and tangled masses of bloody clothes. A trolley-wire was emitting a string of sparks as it hung broken on the ground, and a fountain of water was hurtling out of a broken fire-plug. The animal disappeared to the north; the two medical men sought it for a while and finally gave it up.

Dr. Hinkle decided that he must get his friend somewhere indoors. They succeeded in finding a taxi in the panic, and drove to Parmenter's apartment. Hinkle had to support Parmenter and put him to bed. Parmenter would not eat. He continued to groan in incoherent misery. Hinkle went out and got some evening papers. The headlines shrieked.

"Monster Devastates West Side!" "Mysterious Animal Spreads Terror!" and so forth in

their inimitable style. The reports said it was a fearful bear, bigger than an elephant or a freight engine, or that it was a prehistoric saurian miraculously come to life. They stated that it hunted people as a cat hunts mice, and that it had eaten great numbers of them, and in its savage rage had smashed buildings and vehicles. Gun fire had no effect on it, and it had in fact devoured a squad of policemen who had been sent out to kill it.

Parmenter sat up when Hinkle read some of the reports.

"The poor idiots!" He exclaimed in sudden and composed wrath. The grossly exaggerated reports seemed to have the effect of pulling him together.

"Newspapers act like a bunch of scared hens," he said contemptuously. "They're starting real, insane panic, that's all. What do you think, Hinkle: is that guinea-pig going about deliberately killing people? Is it wrecking the town out of pure spite?"

"It is quite evident," Hinkle said, "that the guinea-pig is far more frightened than the people are. The deaths are mere accidents due to its clumsiness—"

"Yes," reflected Parmenter sadly. "A guinea-pig has about as little brains as any animal I could have picked out. If it had been a dog, it could be careful."

"And the thing seems to be

hungry," Hinkle continued. "Hunger seems to be the main cause of its destructive proclivities. It is hungry and is hunting around for food. And food is hard to find in this little ant-heap."

Hinkle was correct. The whole subsequent history of the huge animal's wanderings around the city represented merely a hunt for food, and possibly a place to hide. It is doubtful if its hunger was ever satisfied, despite the vast amount of foodstuffs that it found and consumed. Certainly it paid no attention to people. The wrecking of the Lake Street Elevated Station was probably due to its efforts to find shelter. In the evening the guinea-pig tried to burrow under the station and hide. The space underneath the station was too small and the steel beams too strong; and it gave up and turned away, but not until it had so bent and dislocated the steel structure that the station was a wreck and train service was interrupted. The last report of the night located it on West Washington Street. People were afraid to go to bed.

In the morning Hinkle dashed out after newspapers. The editorials corrected some of the previous day's errors about the ferocity of the giant guinea-pig, and called attention to the fact that it had definitely increased in size

during its sixteen hours of liberty.

"If it keeps on growing bigger—?" the editor suggested, and left it as a rhetorical question.

The news items stated that during the night the guinea-pig had located the vegetable market on Randolph Street, for many buildings were wrecked and their contents had vanished. The Rush Street bridge was smashed, as were the buildings at the edge of the water. And the city was beginning to go into a panic; for no efforts to stop the animal had as yet been of any avail.

THE evening papers of the second day brought a new shock. Hinkle had spent the day following Parmenter about. The latter dashed this way and that, in taxicabs, surface-cars, buses, and elevated trains, in frantic efforts to catch up with the animal. They did not catch sight of it all day. They arrived in Parmenter's apartment in the evening, dead tired. Parmenter was in the depths of depression. Hinkle opened a bundle of newspapers they had not had time to read.

"LAWYER'S WIDOW SUES SCIENTIST!" announced the headlines; "Mrs. Morris Koren Files Claim for Damages Against Professor Parmenter for Husband's Death. One hundred thousand dollars is demanded by the widow of the

prominent attorney who was crushed in his automobile by the huge guinea-pig yesterday. The plaintiff is in possession of a clear and complete chain of proofs to establish her claim —”

Parmenter sat silent and wild-eyed. Hinkle clenched his fists and swore. He thought Parmenter was suffering enough with all these deaths on his conscience. Now, to have added to it a lawsuit with its publicity, and the almost certain loss of the property he had accumulated, and the complete wrecking of his career! Parmenter gazed now this way, now that, and sat for a while with bowed head. He rose and walked back and forth. He sat down again. He said not a word. Hinkle sat and watched his friend's sufferings with a sympathy that was none the less genuine for being speechless. Before him was a broken man, in the depths of disappointment and despair. All his life Parmenter had been working, not for his own interests, but for the good of mankind. To have the people to whom he had freely given of his life and work turn against him in this unkind way was something he could neither grasp nor endure. Hinkle never saw a man change so completely in twenty-four hours.

A later edition carried the announcement of another lawsuit

against Parmenter. The Chicago Wholesale Market claimed \$100,000 damages for the destruction of their buildings and merchandise stock. Their evidence was also complete and flawless.

By morning, Parmenter's depression was gone. He was pale, but calm and deliberate. His lips were set in a thin line, and the angles of his jaws stood out with set muscles. He had shaken off his nervousness and a steady light shone in his eyes. His keen brain was at work as of old. Hinkle understood; no words were needed. They had been room-mates for four years and knew each other's moods. Hinkle gripped his friend's hand and put his left on Parmenter's shoulder. As eloquently as though he had said it in words, he was expressing his sympathy and his joy because his friend had found his strength again and in spite of his troubles. Troubles indeed, for the loss of life was already beyond estimate; and complete ruin for Parmenter was a certainty.

“Got to find some way of stopping the beast,” Parmenter said succinctly.

“If it can be done, I know you'll do it,” Hinkle replied. “Only tell me what I can do to help you.”

“Stick around,” said Parmenter. “That'll help.” They understood each other.

Hinkle could not help admir-

ing the sheer will-power of the man. Newsboys went bawling by the window. The morning papers announced a fresh string of lawsuits, claiming a total of damages of nearly a million dollars. Parmenter paid no attention. He nodded his head and went on making notes with his pencil on the back of an envelope. He had made up his mind, and news had no further effect on him. Only once he took Hinkle's breath away with a dispassionate, impersonal reflection:

"The civil damage suits will break down of their own weight. The matter has already gone so far that it is ridiculous. It won't pay any of them to spend any money bringing it into court. But, suppose it develops into criminal proceedings?

"Well, that's all I have to expect. Science does a lot of good. But sometimes it miscalculates and does harm. Under the laws of Nature, miscalculators pay the penalty of elimination."

Parmenter sat motionless most of the day. He moved once to eat mechanically, and once to receive reports by telephone from the Institute. His mind was busy, as usual.

The evening papers brought reports that the guinea-pig had gotten tangled up in a trolley-wire and received an electric shock which had sent it scuttling to the Lake. The wire dropped

to the ground, interrupting the street-car service of that part of the city. The guinea-pig ran straight to the water. There it again smelled green forage and ran northward along Lake Shore Drive. In an hour it had devastated all the trees and shrubbery, and eaten up everything green in sight. Because it spent more time at this place, the police detachments caught up with it, and were again vainly pouring bullets at it. Again something startled it, and it ran off westward. It ran so swiftly that it was out of their sight in a few moments. For the greater part of two days they pursued it about the city in this manner, and the tale thereof is largely a repetition of what has already been said.

Parmenter hit his knee with his fist.

"We've got to stop the brute somehow, or there won't be any Chicago left. Who would have thought that a brainless, clumsy, stupid thing would have the whole city at its mercy?"

HINKLE was turning over the pages of the newspaper, scanning the editorials that were already predicting what Parmenter had foreseen, the breakdown of the damage suits. The editor stated confidently that they would never get into court

"Better get a lawyer anyway," Hinkle suggested.

"I won't need one." Parmenter's face brightened. Did he have an idea?

There was no time to ask. A strange murmur had arisen outdoors. A rushing, rustling hum, like that of a flowing river, came from the distance. Now and then shouts rose out of the confusion. Hinkle went to the window, full of curiosity at the city's manifold noises.

He stopped for a moment. He also had a quick brain, and in an instant the meaning of it flashed through his mind. He dashed back and caught Parmenter by the arm. With hats and coats in the other hand, he dragged Parmenter toward the back of the house.

"What's up now?" Parmenter demanded out of the depths of his preoccupation.

"A wild, raging mob!" Hinkle shouted. "The people are dancing with ferocity like a bunch of savages on the warpath. I saw clubs and guns. They probably found that there was no redress in law-suits, and are coming after you to settle it themselves."

Parmenter still dragged back, reluctant to follow Hinkle.

"I don't care to escape," he protested. "What is the use of life in a world where there are people like that?"

Hinkle stopped a moment.

"You seem to have struck some idea for helping this city," he

said sternly. "Do you want them to lay you out before you can rectify this blunder of yours?"

They were blunt, cruel words, but they worked. Parmenter straightened up.

"You're right. I've got a scheme that will work. Come on!"

They hurried through the house toward the rear door. There they stopped. There was a mob in the alley; its fierce yells greeted them as they opened the door. They shut it again and went back in.

"Now what?" asked Hinkle. It looked hopeless. The mob was closing in on all sides of the house. Parmenter stood for a moment. There was a pounding on the front stairs of numberless feet. He hurried to the front door, pulling Hinkle with him; and the two stood so that they would be behind it as it opened. The mob raged and yelled outside and blows thundered on the door.

"They don't know us from John Smith," Parmenter whispered. "Put on your hat and coat."

His plan worked perfectly. The door burst in; its fragments swung on the hinges and splinters fell over the carpet and were trampled by a dozen yelling men, who plunged violently half way down the hall at one jump. In a moment the place was crowded. Parmenter and Hinkle waved

their arms and yelled and mixed with them. No one in the mob knew what was going on anywhere except immediately about him.

They were carried on into the rooms by pressure from behind; the surge of them met the mob coming from the rear door. In a few minutes the fugitives had crowded their way out of the door and into the street. For a few moments and from a safe distance they watched the flames and the firemen. There must have been deaths in that mad stampede. Then they crept off to a downtown hotel and registered under assumed names.

Parmenter sat on the bed.

"You'd like to hear my idea?" he suggested, as though nothing had happened. Hinkle nodded his head because he was too much out of breath to speak.

SIMPLE," Parmenter said ironically. "The human mind is a rudimentary mechanism. To think that it took me—*me*, three days to think of it. It is so simple that I'm afraid to spring it at once for fear there is some flaw in it. Let me take you through the line of reasoning by which I arrived at it, clumsily, blunderingly, whereas it ought to have been a brilliant flash through mine or somebody's else's brain."

He lay back relaxed on the

bed, his hand over his eyes, and talked.

"I wish to analyze the situation thoroughly; on the one hand to make sure that we are not passing up some good method just because nobody has thought of it.

"To stop this destruction of life and property, we've either got to *catch* the animal or *kill* it. There is no alternative, no third possibility. Is there?"

"No. Plain enough."

"They've tried to catch it. It went through the elephant chains of their trap there. Steel columns of the Elevated bend and snap under its weight. It would require weeks of special work to put together something that would really hold it. Our best bet is to kill it. Is that correct so far?"

"O. K."

"Now what are the possible methods of killing?" He held up an envelope on which he had arranged in a column:

Poison
Disease (infection)
Starvation
Trauma (violence)

"Is there anything else?" he asked.

Hinkle thought a while and shook his head.

"These are the only known causes of death, except old age. Now, some we recognize promptly as obviously out of question;

for instance starvation. If we wait for that, we'll starve first. Consider disease. The only available method of producing a lethal disease, is by inoculating with some infection which works swiftly. But, if we do that, we are running the risk of its spreading its infection to the people of the city; the spread of infection might do more harm than the guinea-pig is doing. Perhaps that might be considered as a hope if there wasn't something better. Now, poison—"

"It looks as though poison were your real hope," Hinkle agreed.

"Yes. *Looks* like it. The police thought so too. They've tried poison-coated bullets, and the pig is still here. They've laid poison bait for it—"

"Do you think that the guinea-pig has developed some sort of an immunity against poison?" Hinkle was genuinely puzzled.

"Simpler than that. There is a quantitative relationship. It takes a definite amount of poison to be fatal. Consider strychnine for example. If you remember that it takes 1/1000 of a grain of strychnine per pound of body weight to kill; and suppose the beast only weighed a ton or two, you'd have to have a pound of strychnine, and how are you going to administer it?"

Hinkle sat and looked blank.

"Never thought of that," was

his comment.

"Violence. Trauma. That's all that's left to us," Parmenter concluded.

"And that's out of the question," Hinkle said hopelessly. "How are you going to injure that thing?"

"To think that it's taken me three days to get the idea!" snorted Parmenter contemptuously. "If someone tried to sell you a machine as inefficient as the human brain, you'd throw it back at him."

"Trauma! Didn't I spend two years doing exactly that in France?"

Hinkle leaped to his feet.

"Artillery!" he gasped.

Parmenter nodded.

Hinkle sat down again, the hopeful look gone out of his face.

"No use," he said. "You'll do more harm to the city with the shells than to the guinea-pig."

"Say!" There was a sarcastic note in Parmenter's voice. "Do I have to tell you again that ballistics is a science? But, enough now. We'll get to work and do the arguing later."

Parmenter became a thing of intense activity. He sat at the telephone, called numbers, asked questions, gave orders, with the rapidity of a machine-gun. He seemed perfectly at home in it; obviously he had done it before. From the obscure hotel room he directed a miniature war. Here is

some of the one-sided conversation that Hinkle heard:

"Alderman Murtha? This is Parmenter. I've worked out a plan to kill it. Authority to go ahead. Want me to explain it? All right, thanks for your confidence. We'll have it as soon as there is daylight enough to see by."

Another number:

"City engineer's office? Calling by authority of the police department. We want scale landscape maps of all the parks and plat maps of all the country from here to Clark Junction. Deliver them at once to the Fort Dearborn Hotel."

"Is this the Chief of Police? Has Alderman Murtha called you about giving me authority—? All right, thanks. Where is the animal now? South Side? Listen. Order a dozen truckloads of green stuff, cabbage, alfalfa, anything, dumped in the empty space in Jackson Park where the baseball diamonds are. Have it arrive there shortly before dawn, all piled on one big heap. Then lay a trail of the green stuff on in the direction in which the guinea-pig is at the time.

"And don't forget to keep your men away from that pile of greens!"

HE barked the last words out viciously. Then he called long-distance. He placed several

calls, asking for Colonel Hahn. Finally the Colonel answered. Parmenter talked:

"You know of our misfortune here in Chicago—that's true, but we have just now thought of it. What's the biggest field gun you can rush over here? Right now, this minute. Yes, 150's will do the business. Two batteries. At Clark Junction. A few shells nothing! We want a five-minute barrage to cover an acre! Somewhere around dawn. You're a gentleman and a soldier. A credit to the service, sir!

"Mayor Johnson has telegraphed to the Secretary of War and the authority will come through promptly. I have maps ready for you; send a plane to the Cicero landing-field, and I'll meet it there. And two airplane observers."

He turned to Hinkle.

"Now do you get the idea?"

Hinkle slapped him on the back.

"A 150 millimeter barrage on the brute! That ought to fix him."

"Grind him up to Hamburger steak," Parmenter said grimly.

"But how will you keep from wrecking the town?"

Parmenter made a gesture of impatience.

"Not a building will be injured. The pig will be decoyed to a clear space in the park—"

"Yes, I got that idea."

"The area of dispersion for a 150-millimeter gun is about a hundred yards. That means the first shot will hit within a hundred yards of the target. They will first send over a few dummy shells, and the hits will be reported by airplane observers so that they can correct their range and angle."

"Looks dangerous anyway," Hinkle said thoughtfully. "I'm going to Milwaukee till it's over."

Of course he was not afraid. He was merely trying to carry off the situation lightly in order to encourage Parmenter. He followed Parmenter anxiously. There was little conversation during the two-hour ride to the landing-field. Three military planes were already waiting there. There was a swift conference over open maps and a few minutes' drill on signals, whereupon one plane rose and sailed away into the night, bearing the maps with it to the position of the gunners. Parmenter looked after them longingly.

"It gets into your bones," he observed. "I could hardly keep myself from climbing in with him. Just think! Four miles away the huge field guns are clanking into position; motors are roaring and the line is swinging round; men are toiling in the dark. By morning there will be a semicircle of Uncle Sam's prettiest rifles pointed this way. But, we'll for-

get it and hunt for a telephone."

A telephone was not easy to find in Cicero at one o'clock in the morning. They finally located one in the "L" station. Parmenter called the Chief of Police.

"Where's the thing now?" he asked. "Fine. All arrangements made? Coming?"

Parmenter's eyes blazed. Again he was an artillery officer.

"Jackson Park," he said to Hinkle.

THERE were long waits for cars at night; a change from the elevated to the surface cars; a piece in a taxi, and the elevated again. Dawn was breaking gray over the lagoon when they arrived at Jackson Park. Parmenter raced with feverish haste to the flat, empty space where a score of baseball diamonds had been laid out for the use of the public. A string of half a dozen huge trucks was thundering away from the spot. Two loaded ones were proceeding slowly; men were throwing out a trail of cabbage and alfalfa bales behind them. In the middle of the open space was a heap of green stuff, big as a huge straw-stack.

Daylight was breaking rapidly. A bright orange blotch appeared out in the Lake; glorious streaks of crimson shot through the blues and grays of the water and sky; soon a glowing ball

hung in a purple setting. For an instant the two medical men irresistibly admired the splendid spectacle of the sunrise. But in a moment they were interrupted by the noise of a couple of airplanes coming down in the open field. The pilots stepped out, pushing their goggles up over their helmets. Two motorcycle police came down the driveway.

The two aviators unconsciously saluted Parmenter, and then grinned sheepishly, because he was not in uniform. He looked so much a soldier that their action had been a natural one.

Parmenter gave orders for one plane to taxi across the field out of the way, and remain on the ground in reserve, while the other was to rise and remain in the air to direct the fire. The two motorcycle men were to locate the guinea-pig, and guide the bait truck toward it; and as soon as it had picked up the trail, to hurry back and notify him, here at the park.

When the two motorcycles disappeared, Parmenter and Hinkle waited in nervous impatience. They walked much and talked little. The yellow of the sunbeams grew brighter, and it seemed an age before a motorcycle finally sputtered up to them.

"The pig is coming!" shouted the driver from a distance.

Parmenter threw a smoke bomb; the puff of a yellow smoke

was a signal of the airplane observer, who, by means of his radio, notified the gunners to get ready.

"Poor pig!" thought Hinkle to himself. "The city and its police, the United States Army, motorcycles, trucks, airplanes, 150-millimeter guns, all mobilized against a poor, lost, hungry guinea-pig!"

The motorcycle men stepped out long enough to tell them that the guinea-pig was near Washington Park; it had sniffed a truckful of fresh alfalfa and had whirled around to seize it. The truck was demolished and the driver had not yet been recovered from the debris. Parmenter turned a shade paler and set his teeth more firmly. The guinea-pig was now following along the trail of alfalfa and cabbage that led directly to our heap in the park. Parmenter was silent as the motorcycle whirled around and dashed up the road.

A whining scream came from high in the air; there was a great splash on the beach, which threw up sand and water, left a puff of smoke behind it. The airplane was circling around in a figure "8" between the Lake and the pile of greens. Another scream and a crash in the shrubbery, not twenty yards from the pile of greens. A third heavy thud scattered the edge of the pile of green stuff.

"Good boys!" Parmenter breathed proudly. "They can still shoot."

Hinkle admitted that it was wonderful: the guns at Clark Junction four miles away, the airplane doing figure "8's," and a shot right at the edge of the pile. A fourth shot came over, and scattered the nice heap of greens all over, spread it flat on the ground. Although the shell had been a dummy and had not exploded, nevertheless the impact of it, squarely in the middle, had scattered the cabbage and alfalfa far and wide.

"Damn!" Parmenter was annoyed. No wonder. With the greens spread over an acre, how could the guinea-pig be located accurately enough to concentrate the fire properly. Someone had missed that point in the plans. They ought to have omitted ~~that~~ last shot.

Parmenter was swearing and shaking his fists. He started toward the scattered pile of greens on a run. Hinkle gazed dumbfounded, as he began with demonic strength to toss bales of alfalfa and heaps of cabbage back on the stack. He started over to help.

Suddenly, when Hinkle got near enough to be within earshot Parmenter whirled around, with a terrible, savage expression on his face.

"Back! Go back!" he roared.

The fierceness in his tone stopped Hinkle. He stood and stared.

"Go!" shouted Parmenter in an agonized snarl. "Go, damn you! Quick!"

Hinkle was too amazed to move.

"I wanted to help you pile it up—" he faltered.

Parmenter drew a pistol from his pocket, a huge forty-five caliber Army automatic, and pointed it at Hinkle.

"Now go!" he shrieked in a shrill voice. "Right now. And run! RUN!"

The command in his voice awed Hinkle. Despite the surging of a turmoil of conflicting emotions within him, he turned and ran.

"Don't stop till you reach the lagoon!" Parmenter ordered after him.

"Damn them and their mobs and lawsuits!" was the last thing Hinkle heard him growl.

HE reached the lagoon and looked around. Parmenter was working feverishly, tossing greens on a rapidly growing stack.

Now there came a hubbub from the direction of the 63rd street entrance, the rattle of motorcycles, shouts, the crashing of brushwood, and an oppressive, heavy thudding. In a moment, half a dozen motorcycles drew up

beside Dr. Hinkle. A hundred yards away, a huge, towering bulk loomed past. The great guinea-pig thundered by, its arched brown-and-white back as high as an apartment house, crashing through shrubbery, flattening out trees, sweeping aside fences and bridges as though they had been spider-webs. It skimmed along, eagerly nosing at the ground, following the train of vegetables, piping its impatient huge, fluty whistles, ripping up lawns and drive-ways in frantic attempts to pick up the tiny fragments of food.

Suddenly it sighted the heap of food. It gave a gigantic leap in that direction, and ran.

"Parmenter!" shrieked Hinkle, and started out toward the busy figure of the scientist. A dozen hands seized him and jerked him back.

"Parmenter!" he moaned again, impotently.

Parmenter looked up at the yells of the motorcycle police. They were making Hinkle's ears ring with their shouts.

"Look out!"

"Come here!"

"What's the matter with you?"

Parmenter waved a light gesture to them, and calmly stepped out of the way of the gigantic rodent. The pig hungrily plunged its snout into the succulent food he had prepared for it. Hinkle covered his face with his hands.

The last thing he saw was Parmenter reaching out his hand to stroke the towering side of the busily feeding guinea-pig.

He also recollects momentarily hearing the roar of the airplane describing figure "8's" high in the air over the baseball park. Suddenly there was a long, wailing screech in the air, and a terrific roar. A volcano suddenly seemed to burst where the guinea-pig had been munching. Vegetables, guinea-pig, Parmenter, all disappeared in a flash. In their place was a wall of smoke, rising swiftly upward, with black fragments whirling and shooting in all directions.

For five minutes, Hell roared and churned and blazed out there. The din was deafening, crushing. Showers of dirt and spatters of blood reached Hinkle and the motorcycle men. Then it stopped suddenly short, leaving a strange, painful stillness, punctuated by the feeble rattle of the airplane.

Out where the baseball field had been, a huge crater yawned. When the smoke eventually cleared out of it, there was no guinea-pig. Here and there were bloody masses of something lying about the acrid, smoking earth.

For many minutes, Dr. Hinkle stood on the brink of the reeking chasm, his hat in his hand, his head bowed.

THE END



THE SPECTROSCOPE

By S. E. COTTS

THE RIM OF SPACE. By A. Bertram Chandler. 220 pp. Avalon Books. \$2.95.

So much time has passed since I reviewed an Avalon book, but in truth, the company seemed to have fallen on such lean times that their recent output hardly merited the expenditure of energy and ink involved even in a bad review. Now, at last, they have come up with a book which, though it isn't a winner, is a respectable contestant.

On the far off edge of space live the Rim Runners, castoffs from the various respectable Services and Commissions of the galaxy, people who have lost their jobs, or are running away from wives or routine or themselves. Derek Calver has fled the inner worlds to join up with the Rim Runners. He gets to know a strange assortment of people as his new shipmates, including

one who calls herself "Calamity" Jane because disaster always seems to accompany her. Ultimately Calver finds himself and a sense of purpose, but not before he has seen many other planets, has helped save the ship, has succeeded the Captain, and has sacrificed the ship in a noble rescue attempt.

As I said before, this is not a great book but a satisfying entertainment. Perhaps if Avalon did not attempt to be such a friend of science fiction by issuing a new book every month, they would be able to keep up this modest standard. Certainly, if any group as a whole is concerned with quality instead of quantity, it ought to be the scientists and those who deal in subjects of a quasi-scientific nature.

BYPASS TO OTHERNESS. By

Henry Kuttner. 144 pp. Ballantine Books. Paper: 35¢.

This is a first-rate anthology by one of science fiction's most respected writers. Included are some of his earlier and less well known stories. They are about evenly divided between the hilarious and the grim, though both extremes are handled with equal conviction. I suspect that the particular ones you may fancy will change with the weather. When I first read the collection, the serious ones caught hold of me, but in glancing through again a few weeks later, I found that the humorous ones were the ones I really wanted to reread. Am I fickle? Nope, that's strictly for women. To back up my confusion, and also to show Mr. Kuttner's range, here is a sample from each category.

There is a searching study of what may be the classic parent-child conflict of the future in "Absalom." The story concerns a father who was a child genius and his son, who is even more than that. The efforts of the father to dictate the child's course of study and his mental defeat at the hands of his own flesh and blood make superior reading. At the other end of the scale, is a lightweight trifle, yet one which casts a warm glow over the reader. It is called "Housing Problem." When Ed-

die and Jacqueline, a young married couple, take in a lodger, they willingly agree to take his birdcage, too. The only trouble is that it doesn't contain birds. Instead, it is a veritable Pandora's box full of weird adventures. And when the young couple's curiosity overcomes all scruples, they find that the original tenants of the cage won't stand for it. I don't want to give away the delightful twist so I won't say more except—for more of the same, take the "Bypass for Otherness."

NOT WITHOUT SORCERY. *By Theodore Sturgeon. 160 pp. Ballantine Books. Paper: 35¢.*

What worked so well in the case of the Kuttner book has been tried with much less success in this anthology by the usually reliable Mr. Sturgeon. These stories are from his first published collection in 1948, and are the ones which have not been reprinted in the interim. It is easy to see why. They are definitely Sturgeon stories, but age has not treated them kindly. They lack the real impact and vigor of his best things, and most of them could settle right back where they came from without a noticeable loss. They are rather ostentatious efforts that never really come off—a lot of words which add up to very little. Strangely enough, the one

exception to this, the one story that really reminds me consistently (not just in flashes) of what Sturgeon is capable, is a story called "Brat", which he claims he has no recollection of writing! I guarantee it will make all parents immediately rush to the baby's room and take a long hard look at their offspring. As for the rest, I'd rather wait storyless for Sturgeon's next book than reread these again.

TRIANGLE. By Isaac Asimov. 516 pp. Doubleday & Company, Inc. \$4.95.

If the dredging up of old material was unfortunate in the case of the Sturgeon book, it is triply so in this Doubleday venture, a reprint of three very early Asimov novels in one handsome hardcover format. Aging may bring out the bouquet of a fine wine, but it appears to have done little or nothing for these pale efforts. Usually it is of interest (if only in the historical sense) to see the early works of a well known artist of any field in retrospect. Usually there is a fascination in trying to find the start of certain persistent trains of thought in embryo form. Even with the best will in the world, however, I'm unable to trace any such things in these novels with the possible exception of some time twists in the second. In a

strange way, the complete lack in these early stories of any of the characteristics which transform his later ones serves to make his current accomplishments little short of a miraculous about-face.

The first two novels are so much alike in basic plot and characters as to become almost indistinguishable. In each one, a virtually helpless man is responsible for staving off the destruction of a world. In the first, *The Currents of Space*, the hero is helpless because he has been subjected to a psychic probe to erase his memory. In the second, *Pebble in the Sky*, the hero is helpless because he has found himself suddenly in another era whose customs and language are so incomprehensible to him that he almost loses his sanity. Both books are further complicated by the same brand of conspiracy and counter-conspiracy, and both are further simplified by the same type of love interest. In fact, all three novels give the impression that they may have been concocted of the same ingredients in slightly different proportions in a very sterile test tube. Well, at least that is scientific, I suppose. This feeling is not lessened, either, by the fact that all three are the same length.

The third novel is so bad that it almost succeeds in being

funny. Titled *The Stars Like Dust*, it resembles nothing so much as a Buck Rogers-type cartoon strip. The characters are straight from the Sunday supplement—the boy-wonder hero, the beautiful girl about to be married off to an old lecher, her timid father who turns out to be strong and brave, her uncle who is enamored of making fancy gadgets and performing tricks with them. The dialogue is just what you might guess such people to say, but without the charm of seeing it floating in a cartoonist's little balloon above their heads.

I can easily forgive Mr. Asimov for writing these novels, because he has given us so much that is marvelous since then, but I can't forgive his letting them be reprinted again. It was an unnecessary error in judgment.

THE LOVERS. *By Philip José Farmer. 160 pp. Ballantine Books. Paper: 35¢*

I looked forward to reading this latest book by Philip José Farmer with considerable interest. His previous effort, a collection of short stories called *Strange Relations*, though not faultless, was full of originality. It was, primarily, a conjecture about some biological and sexual oddities that might inhabit the universe. Now he has tried a novel (expanded from a short

story) and it cannot really be called a success. The originality that sparked the short stories is almost entirely lacking and when it does come in, at the very end, it does so in a very dry textbook fashion devoid of any life. What is left, then, is a perfectly straight story. As such, it contains some nice touches but these are not really explored in depth, and the whole is reminiscent of countless other acceptable but unrewarding books published each year.

The hero, Hal Yarrow, is a jack-of-all-trades in languages (called a "joat"). He lives on Earth at a time when humanity has become so populous that rigid controls surround all thought and action, ostensibly in order to prevent chaos. Even apartments have two sets of occupants, one for day and one for night. These paltry accommodations are assigned, as is everything else, as rewards. Less satisfactory performance of duties to the Sturch (the State-Church) results in a less satisfactory job, poorer living quarters, and more horrible people with which to share them.

This is a workable idea, and in the beginning one's interest is aroused. But the hero is sent by the government on a mission to Alpha Centaurus, and still the reader is given no coherent idea of what has happened to bring

(continued on page 146)

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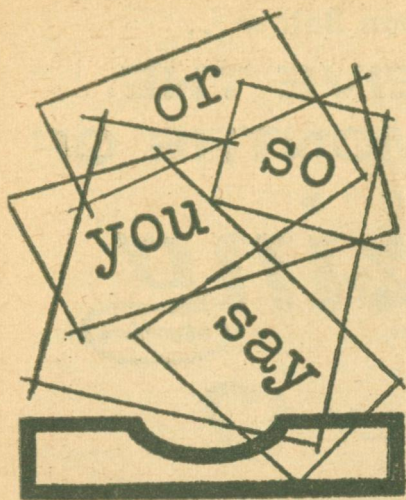
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Dear Editor:

The July issue was only fair-ish as compared to the last few Amazing has put out, but still quite enjoyable. I rate the stories as follows:

1) "Pariah Planet"—good old reliable Murray does it again, a smooth, competent, interesting yarn. Glad you can get him to do "landing grid" yarns for you—they're about his best work.

2) "Coming of the Ice"—your best so far in your series of "classic reprints". The style is a little dated, but not enough to hurt, and the story has genuine power. But I still would prefer you to eliminate this feature unless you're willing to reprint long pieces.

3) "Whatever Gods There Be"

—fair. Nothing brilliant, but readable enough.

4) "Father"—ouch! This one is strictly out of 1950 AMZ, not 1961. I'm afraid you fumbled badly on this one.

I see my friends Al Andrews and Bill Plott have given you their candidates for the 3 books Wells' hero should take along, to rival yours. I agree on one from each of your lists, and suggest a third all my own. The Bible I agree with—it is great literature, reasonably accurate history, and religious precepts rolled into one. Also Machiavelli—though if there were a 1-volume edition of *The Prince* and *The Laws* out I would have him take it rather than either alone. The first is the best manual on how to get power and keep it, but since he won't live forever, the second is one of the best studies of constitutional government ever done. The third book I would suggest is Newton's *Principia*—decidedly the most basic work ever produced in science. *Origin of Species* isn't in the same class. Also, OOS is primarily descriptive, with little value in application, whereas Newton is immediately reducible to engineering in many instances. I rest my case.

David G. Hulan
132 Goss Circle, 9B
Redstone Arsenal, Ala.

• Question is, what are you

going to do with engineering theory without the industrial technology to back it up? Those guys are always going back in time to make a fortune in TV sets and then find out no one knows how to make a vacuum tube.

Dear Editor:

Bruce Elliot—incompetent or intellectual? That is the question. After the perusal of *Planet of Shame* one is faced with a dilemma: classification of Elliot's novel. It is either a satirical melodrama or a run-of-the-mill space opera. The simplicity of the dialogue and the shallowness of the characters contradict the motivation behind the central train of thought. However, in spite of the existing confusion, the action and background prove delightful.

Christopher Greco
Birmingham, Michigan

● *It's interesting to note you differentiate between an incompetent and an intellectual. Haven't you ever known an egg-head who didn't know a toggle bolt from a relay switch?*

Dear Editor:

Isn't it AMAZING what can be had for 35 cents! Especially the current July issue. Not only was the whole issue readable, but the main story deserves superlatives from anyone skilled in their use.

Moreover, the July issue had a quality I had not seen in an sf mag, except in occasional stories, during the few years that I have bought them all, a quality apt to be overlooked by too many readers. I was able to travel from cover to cover without my person being vicariously invaded by the arrogant fume-and-ash exhalations of tobacco addicts and the safety of my space-travels vicariously imperiled by booze-guzzling space pilots, astrogators, crews and fellow space-travelers.

Of those authors who may be "able" to "hold their liquor" at the typewriter, too many let their booze-love slop all over what they write, nothing contributed to the stories thereby, results being quite the contrary!

And the extent to which some authors jam their stories with unrelated narcotic incineration of tobacco, with its necessarily incident consumption and pollution of scarce survival-vital atmosphere, as in spacecraft, space-stations, moon domes, etc., stretches the credulity of our antique twentieth century terran not only concerning the scientific practicality but also the mores of times to come.

Far from blameless is also the author whose stories make a mere once or twice deference to the practice of boozing and tobaccoing—again, unrelated and superfluous to the story—as if

he feared that to do otherwise would offend the ubiquitous pressures of those whose urgings would subvert everything and everybody, at all times and everywhere, to giving obeisance to the godhoods of booze and tobacco.

I would like to believe that the commendably booze-less and tobacco-less content of the July issue of AMAZING was not accidental but exemplary of AMAZING henceforth; also that the other sf mags will recognize the need to emulate.

Axel W. Berggren
Apt. 6, 45 Baker Street
Jamestown, New York

● *Far be it from us to pollute the atmosphere of a moon-dome, but we must plead Not Guilty to having teetotaled on purpose. We are all for smoking and drinking in moderation, off-duty, and in an atmosphere. We also like girls.*

Dear Editor:

"Pariah Planet" by Murray Leinster in the July issue of AMAZING is a revolution in adventure science-fiction. Imagine! The author forcibly brought out the fact that in a space ship one woman plus one man does not equal orgy. Congratulations Leinster and to you, editor, for not having the author "spice up" the story. It's about time readers realize that most people don't re-

vert to animals because nobody's watching them. Not that I have anything against sex, but it's a poor substitute for a story line.

As for Kenneth Erick's comments on s-f movies, I am forced to agree. It's too bad that the public doesn't realize that the science-fiction writers don't usually write the s-f movies. The monstrosities that stagger slobberingly across the screen are the work of Hollywood hacks who know very little (if anything at all) about science-fiction. A good example comes to mind. Wilson Tucker once turned down \$10,000 for film rights to "The Long Loud Silence" because 1) a hack script writer would have gotten 50% and 2) the script was, in Tucker's own words, "... the most miserable piece of junk imaginable. Every trite cliché, every worn bit of hackwork seen in pictures since the invention of the talkies was thrown into the script . . ."

Even producers who seem to be hep to s-f aren't free from this. George Pal in his production of "The Time Machine" had the Eloi blown up to a size more suitable for the hero to fall in love with. And as everyone who has read the book knows, Weena never survived the adventure, nor is there any evidence that the hero returned to 802,701. And just to conform with the current fad a rather long scene full of

atomic doom was thrown in. The basic trouble, you see, is that unlike s-f magazines the movies don't have experienced editors.

David B. Williams
714 Dale Street
Normal, Illinois

● *We couldn't agree more. For some time now motion picture companies have been trying to interest us in publishing full scripts of their upcoming s.f. films. Apart from the fact that scripts make hard reading, the stories are generally so bad, so trite, so dull, we wouldn't print them in any form.*

Dear Editor:

AMAZING STORIES is presently the best printed, best organized magazine in existence. The quality of your paper is better than most, and, of course, the stories you print are the best in the field. Your July issue was no exception in the outstanding quality you have been presenting for some period of time now.

"Pariah Planet" was one of Mr. Leinster's finer works, and, instead of going through the routine plagued-planet-needs-help bit, he began the novel a couple of decades after the plague. This is the first time I've ever seen a plague novel handled this way, and I'm glad to see someone's still thinking creatively or originally in that sector of science

fiction. Your policy of printing illustrations on back covers and your trademark on the inside of the back cover is the best idea you've had so far—keep it up, it's certainly more attractive than an advertisement.

The story "The Coming of the Ice", by G. P. Wertenbaker was your best reprint to date—a true classic. The author writes with an urgency and creates a mood that only a few writers have been able to achieve. And speaking of reprints, I've just finished reading your October 1926, Volume 1 #7 issue, which I acquired from a second hand dealer at the price of \$1.50. Two of the serials, Verne's *Purchase of the North Pole*, and Wells' *Island of Dr. Moreau*, I'd already read in Ace book form. The other two serials by Garrett P. Serviss and A. Hyatt Verill were excellent, though now I'll probably have to wait a couple more years to see how they end.

Bob Adolfsen
9 Prospect Ave.
Sea Cliff, N. Y.

● *Leinster received a lot of praise for "P.P."—and it comes as no surprise to us. Be sure to see our December issue for a Moskowitz Profile of Leinster.*

Dear Editor:

Congratulations to Murray Leinster on a great story in your

July issue, entitled "Pariah Planet." I very much admire Mr. Leinster and his work, let's have some more of him. I enjoy your magazine, but I am curious as to its effect on the public. I bought six copies of the July issue, and asked my friends to read it. One out of the six wouldn't give the magazine back. The other five suggested we try it again. Keep up the good work, I hope that many more science fiction fans will wake up. They will want more adventures of men and women in the future, pitting their brains against danger, instead of a monster slithering thru a dark alley. Your magazine does much for the sf field . . . thanks.

Harry Siebert
1457, Kenwood Drive
Pomona, California

● *Any fan who buys five copies for his friends is not only dear to our heart, but to our circulation department! Keep up the good work, Harry! And may other steady readers take the hint and do likewise.*

Dear Editor:

Excellent! That is the one word which describes your June issue. In my opinion there is a tie for first place between the Verrill reprint and the Calin nov-
elet. The conclusion to the Elliott

novel was interesting and quite readable. The profile on Heinlein was entertaining.

Now for a request: how about reserving one page a year to announce the "Hugo" Award winners?

Bob McDermott
17 Alscraft Rd.
West Haven 16, Conn.

● *A good idea, which we will carry out at the appropriate time.*

Dear Editor:

I thoroughly enjoyed your 35th Anniversary issue of AMAZING, particularly "Armageddon 2419" being an old Buck Rogers' fan. In the forward of this story, you made mention that some papers still run Buck Rogers as a comic strip, and I would be very obliged if you could furnish me with details as to who and where.

I would also be obliged if any reader can supply me with information of old copies of the comic book series they may have and wish to dispose of.

Alan Morton
42 Lucerene St.
Ashburton Melbourne
Vic. Australia

● *For information about Buck in the comics, write to King Features Syndicate, 235 East 45th St., New York, N. Y., which handles the strip.*



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THE SPECTROSCOPE

(continued from page 138)

Earth to this sad situation.

The liveliest sections of *The Lovers* are the results of Mr. Farmer's developing, and highly welcome, sense of humor, as in his description of Yarrow's first ride in a car. (Earth no longer has such things.) But even this is neutralized by such pedestrian nonsense as the way the puritanical Yarrow is seduced by

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a lovely uninhibited savage. (Shades of all the South Sea stories that ever were!) Does it sound sexy? Well, it isn't really, because the hero acts so stupidly that one wants to take a poke at him.

Just chalk this up as one that didn't come off and leave it at that, because Mr. Farmer undoubtedly can write and so merits interest and attention, even though this time not praise.

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