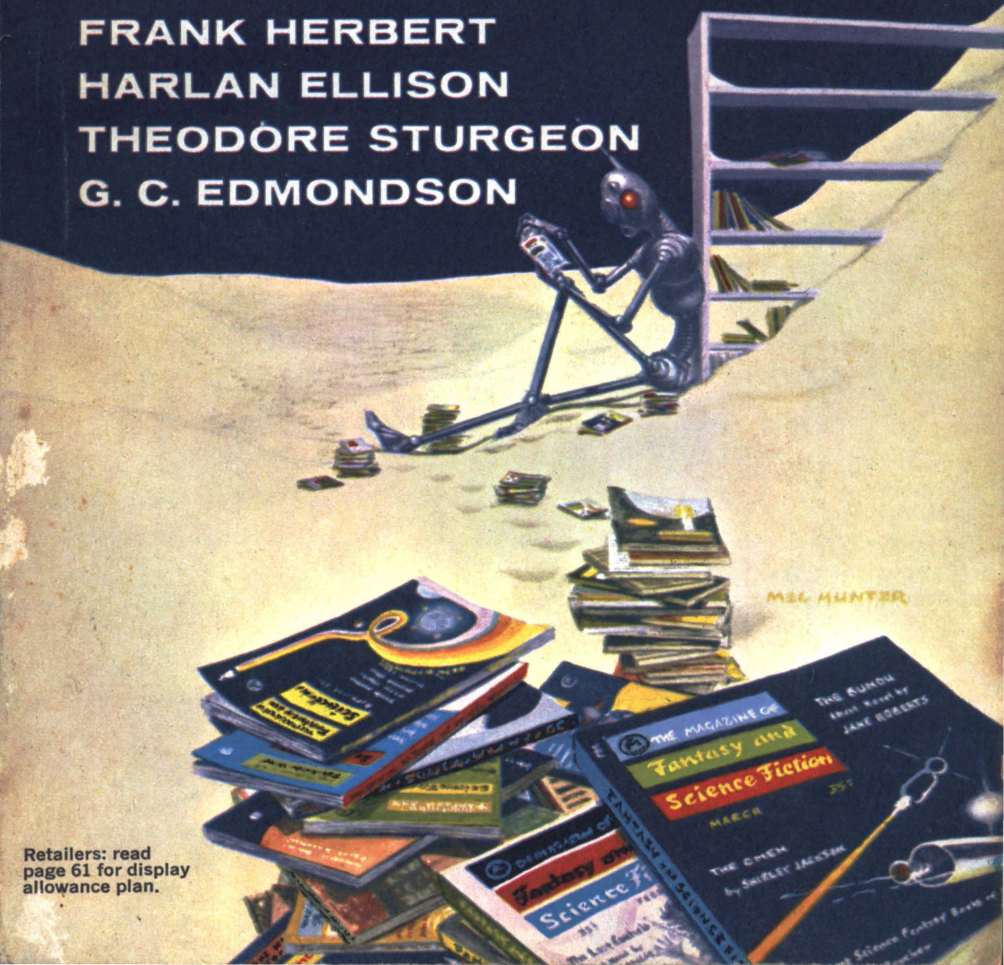
PDC

THE MAGAZINE OF Fantasy AND Science Fiction

A MERCURY PUBLICATION

MAY 60¢

ISAAC ASIMOV
FRANK HERBERT
HARLAN ELLISON
THEODORE STURGEON
G. C. EDMONDSON



Retailers: read page 61 for display allowance plan.

Fantasy and Science Fiction

MAY • 21ST YEAR OF PUBLICATION

Joseph W. Ferman, PUBLISHER — *Edward L. Ferman*, EDITOR

Andrew Porter, ASSISTANT EDITOR — *Isaac Asimov*, SCIENCE EDITOR

Dale Beardale, CIRCULATION MANAGER

LIBRARY OF CONGRESS CATALOG CARD NO.: 51-25682

The Magazine of Fantasy and Science Fiction, Volume 38, No. 5, Whole No. 228, May 1970. Published monthly by Mercury Press, Inc., at 60¢ a copy. Annual subscription $7.00; $7.50 in Canada and Mexico, $8.00 in all other countries. Postmaster: send Form 3579 to Fantasy & Science Fiction, Box 271, Rockville Centre, N. Y. 11571. Publication office, 10 Ferry Street, Concord, N. H. 03301. Editorial and general mail should be sent to 347 East 53rd St., New York, N.Y. 10022. Second Class postage paid at Concord, N. H. Printed in U.S.A.

Eric Norden has two non-fiction books in the works for Grove Press and is a regular contributor (articles and interviews) to Playboy. *The January issue of* Playboy *notes that Mr. Norden has been awarded a thousand dollar prize for best article of the year (on "The Paramilitary Right"), which seems no small accomplishment when one looks at the names on the covers of Mr. Hefner's magazine. We're happy to report that Mr. Norden is as good at fiction as he is with non-fiction, as demonstrated by this story about a strange hunting expedition in the mountains of Thessaly.*

THE FINAL QUARRY

by Eric Norden

THE LAST UNICORN ON EARTH lay dozing in the sun on a hilltop in northern Thessaly, memories buzzing softly through his brain like the murmur of distant bees. As unicorns go, he was not a noticeably distinguished specimen, for age had dulled the gloss of his ivory pelt, and here and there along his withered flanks tufts of hair had fallen out, lending him a patched, faintly moth-eaten quality. But his eyes, even now when filmed with dream, were luminous with wisdom, as if they had drunk in the centuries like dew, and his imperious spiral horn rested lightly on the grass, a gleaming golden icicle in the summer sunlight. He stirred once in his sleep, as the thoughts of a child in the valley reached him, crystalline as the chime of a steeple bell, and then, replenished, lapsed into deeper slumber. The dark, demanding voices of the earth no longer spoke to him, and it had been a thousand years since silent wings beat the air above his head, or tingling laughter pealed in ageless mockery as he sipped from the waterfall below the gorge, but the old unicorn did not begrudge the new masters of earth, and was content to savor the endless tapestry of his dreams. A zephyr prematurely tinged with autumn brushed his horn gently as a butterfly's wings, perhaps in warning, but he slept on.

The older and immeasurably grosser of the two Englishmen shoved his plate of cold stuffed

eggplant across the rough-planked wooden table with a violent, stabbing motion and snarled at the innkeeper.

"If this is the best you have to offer us, we shall ride on to Pharanakos tonight!"

His florid face was suffused with a darker flush of fury as he wrenched the coarse linen napkin from his neck and hurled it to the packed dirt floor. His companion, a slim youth in his early twenties, elegantly attired in a fawn-gray cheviot lounge suit of a cut popularized by the late king and a resplendent waistcoat of brocaded maroon silk, languidly surveyed the room and tapped a cone of ash from his thin black cheroot onto the remains of his own dinner.

"My dear Marius," he drawled, "for once I do wish you could forget your belly and remember the purpose of our visit. We are not here as scouts for the *Guide Michelin,* and as for myself, I should rather grub like a pig for roots than spend one more hour in that infernal coach."

As the innkeeper hastily snatched the plate from the table and scurried towards the kitchen amidst a flurry of apologies in broken English, Sir Marius Wallaby, Bart., turned his wrath on his traveling companion.

"God's blood, Deverish, don't let me hear from you what the purpose of this journey is. If I hadn't been gulled by your mad tale back in Athens, I wouldn't be sitting in this miserable excuse for an inn, two hundred miles from the last pretense of civilization, feeding on warmed-over table scraps and guzzling mare's piss for wine." He groaned piteously. "And my last bottle of hock gone two days back, with no decent cellars between here and the coast."

Nigel Deverish sipped with overtly sadistic relish from his glass of white *Retzina.*

"As for myself, I rather enjoy its clean, piney bite," he said. "But then I am obviously no connoisseur in such matters."

"The matters in which you are a connoisseur I tremble to contemplate." The older man's anger crumpled abruptly as his huge frame slumped back into a rickety rattan chair precariously accommodating his twenty stone, and he ran one hand, plump and livid as a baby lobster, through thinning sandy hair before speaking in a voice thickly edged with fatigue.

"I must caution you I don't intend going on like this much longer, Deverish. Don't think I'm not up to it physically—God knows. I've been on treks in Africa and Brazil that make this expedition look like a walking tour of Surrey." He grimaced wearily. "But then I was always after something tangible, something that left a spoor I could follow, something I could fix in the sights of my rifle. We must have passed

through thirty of these halfarsed villages in the past three weeks and no one even knows what we're talking about. The whole idea is so damned vague, it's like trying to grab a handful of smoke, and it's getting on my nerves, Deverish, I'm not ashamed to confess."

Nigel Deverish eyed his companion with thinly veiled contempt. Sir Marius Wallaby was a huge, corpulent man in his early fifties, with a flaccid basketball of a head, candid, hyperthyroid eyes of a pale, china-blue prominent in his ruddy face, now stubbled by a two-day growth of orangy beard, and a mouth pursed like a querulous rosebud. He was dressed with customary carelessness in a rumpled Norfolk hacking jacket, multidarned cardigan of muddy-brown wool, heather-green tweed knickers, and battered Peal's brogues. Hardly the picture, Deverish reflected grimly, of a man worth half a million if a guinea, but Wallaby cared nothing for appearances, or money. His only passions were, in interchangeable order, the table, the hunt, and the bottle. Wallaby's tempers were fierce but transient, for like a toothless dog he had learned long ago to rely on his bark. He was as petulant as a child, Deverish had perceived on their first meeting, and as innocent; an easy man to use, but only if one were willing to cosset him like a nanny.

"My dear Marius," he now soothed, "no one understands better than I your disappointment. But surely, for the man of indomitable will, such frustrations only serve to redouble the determination to succeed. Had Stanley given up before Victoria Falls . . ." He let the sentence trail off meaningfully, mildly sickened by the ingenuousness of his appeal, but equally convinced of its effectiveness.

"Yes, yes, I suppose you're quite right," Wallaby murmured, sitting imperceptibly straighter. "It doesn't do to get discouraged too quickly on these things." He sipped distastefully from his wine glass. "Years ago in Mombasa I ran into a dicey old Dutchman who swore he'd seen a white rhino in the Gambezi. He'd been tracking it off and on for years whenever he could steer a safari into the area, and everyone thought he was crackers, of course, but one day he walked right into Starrs', threw the skin on the bar, and ordered drinks for the house. Showed us all, he did. Never forgot it." Wallaby scowled darkly. "Which is probably why I'm here with you today instead of enjoying a bottle of decent hock in Athens."

The innkeeper moved deferentially to their table and placed a worn copper platter before Sir Marius. "This looks a bit better," the Englishman grunted as he du-

biously surveyed an array of *media dolma* and *moussaka,* a local dish of beef cunningly cooked with aubergines, mushrooms and tomatoes, and smothered in a simmering souffle of *feta* cheese. The elderly Greek smiled encouragingly and placed another bottle of *Retzina* on the table.

"You enjoy, *Kyrios,* you enjoy." Panayotis beamed proudly. "I know how to cook for English. I work in Athens three years. That's where I learn your language, also French and a little Turkish." The innkeeper had regaled them earlier with his travels, for as the only local man to venture forth as far as fabled Athens and the sea, he was a minor celebrity, and served as mayor of the cluster of rude stone-and-wattle cottages comprising the hamlet of Theodoriana. "You will find the best food in the Pindus mountains right here, here with Panayotis, milord."

"I don't question that," Sir Marius grunted, tentatively slipping a fork into a mussel entwined with grape leaves, "only whether it's a recommendation." But after one bite, he smiled abruptly, like ice melting, and nodded approval to the innkeeper, who half giggled with relief and obsequiously bobbed his grizzled head in an awkward half-bow. Why do the peasants always fawn on the hulking, ill-mannered boor, Deverish reflected bitterly, when it's so obvious I'm the sole gentleman in our party? He gulped his *Retzina* convulsively, and lit another cheroot, gratefully dragging the harsh smoke into his lungs.

After the meal was over and cloyingly sweet honey-and-nut pastries had been washed down with Turkish coffee and ouzo, Wallaby belched contentedly and plucked a cigar from a battered lizard-skin case.

"Doubtless have indigestion later on, but at least I feel halfway human for the time being," he grumbled. Panayotis diffidently presented a bill, and Wallaby, without examining it, tossed a jumble of fifty-drachma notes onto the table.

"Take our rooms from that and keep the change."

The innkeeper's eyes fixed hotly on the bills for a long moment before he scrabbled them up with trembling hands, his mumbled words of gratitude cut short by Wallaby's roar for a bottle of Metaxa. Deverish choked back the bile in his throat. Of course the old fool could afford to throw away his money—he'd never had to sweat for it. He cursed for the thousandth time the perverse law of nature ordaining that cretins like Wallaby be blessed with wealth, while the rare man of genius must grovel in muck for the offal of everyday existence, lyric words and vaulting imagery strangled stillborn. Deverish

stared at Wallaby guzzling brandy like a bloated pig greedily snuffling for truffles, and his hand involuntarily strayed to the sheaf of poems in his jacket pocket. It would not be long now. His eyes slivered as he smiled suddenly, exultantly, and when he spoke he no longer had to struggle to keep the hatred from his voice.

"Don't you think you overpaid the chap a bit, old boy?"

Wallaby looked up from his brandy and scowled.

"You're bad enough as a guide, Deverish, don't start doubling as my accountant. In any case, the draft from Athens gives me enough to buy and sell this whole pigsty of a town—not that I'd want it, God knows." He slurped noisily from his glass and wiped his moist forehead with a tattered red bandana. "And another thing, Deverish, once and for all stop calling me 'old boy', and trotting out your whole insufferably tatty Oxbridge act. I don't give a damn about a man's birth, and I've always held Debrett's the least reliable stud-book of the lot, but the pose bores me to tears and will only get you laughed at back in London." His eyes suddenly softened. "I don't mean that harshly, Deverish. Just be yourself, that's all. You'll get along better that way."

Deverish stood up abruptly, his sallow cheeks flaming. Wallaby's insult he could have almost savored, on account so to speak, but the gratuitous fillip of condescension was intolerable. His fists tightened into balls and he spun on his heels to hide his face from Wallaby's eyes.

"I'll speak to the innkeeper now and see if he knows anything," Deverish said tautly, his words barely above a whisper.

"All right, all right, we've gone this far, go ahead." Wallaby belched, and took a long pull from his glass. "Though I'm beginning to think that photograph of yours was some kind of forgery, or perhaps just a shot of an ibex or aurochs. You probably wouldn't know the difference anyway."

With a surge of secret satisfaction, Deverish composed himself. He, after all, was the master of this situation. There had never been any photograph, merely the maudlin mumblings of an old Greek in a Salonika bar drunkenly bemoaning his native Karanakis where unicorns still lived and flitted through the forest glades. Deverish had been amused at first, but the old man's words held the germ of an idea. He had met Sir Marius Wallaby for the first time the day before at the Travellers' Club, where he had eloquently requested the wealthy baronet's backing to publish a volume of his verse, only to be summarily rebuffed and packed off like a beggar with a fiver stuffed in his pocket as a token of Wallaby's lar-

gess—which, to make it worse, he was forced by dint of circumstances to accept. But Deverish knew of Wallaby's reputation as a hunter; the old man had stalked everything from elephants in Africa to cougars in Peru, and photo stories of his expeditions appeared regularly in the lurid illustrated press. If the opportunity to bag the greatest game of all—the last surviving unicorn—presented itself, could the old fool resist the temptation? Wallaby's childlike credulity needed little priming from Deverish, and the baronet accepted the tale eagerly, immediately moving to outfit an expedition. Now, three weeks later, the two of them were alone in one of the most desolate areas of Greece, two hundred miles from the nearest police station, in a mountainous countryside where accidents were bound to occur, particularly to someone fat, clumsy and slow of foot—someone, above all, with the equivalent of two thousand English pounds in Greek drachmas stuffed in his pockets . . .

Breaking off his reverie, Deverish strode to the kitchen and peremptorily ordered the innkeeper to their table. Panayotis followed, but not, Deverish noted irritably, with the alacrity he displayed in response to even the rudest of Wallaby's summonses. Once seated, the old Greek gratefully accepted a glass of Metaxa and listened closely as Deverish explained their quest in fluent Greek, frowning thoughtfully before finally replying in tortured English—Wallaby didn't know a word of any foreign language not featured on menus—that he had never heard of such an animal.

"But, milord," Panayotis continued haltingly, addressing only Wallaby as was his custom, "there is an old man, a priest, who lives in the woods. He stayed many years in a monastery on Mount Athos and is now what you would call *hermetos,* for he exists only on nuts and berries, and will kill no living thing for food. There are some who say he is mad—" Panayotis crossed himself surreptitiously at the blasphemy—"but I see much truth in his eyes. He lives in a cave at the foot of Karajides mountain, but once in a while he comes here, and I give him bread and wine." He took another sip of Metaxa. "This priest knows the woods and mountains like none of us, who are all farmers and seldom wander far from our fields. I have seen him in the forest once or twice, and the animals follow him, even the deer, and are not afraid. He feeds them, and sometimes he talks to them." Panayotis looked momentarily embarrassed, fearful the Englishman would despise his credulity. "Of course, milord, for all I know he is not even a real priest; the priest at Calabaris in

the valley comes here once a month to preach since we have no church of our own, and he says he knows nothing of this *hermetos*. But I think he is a holy man."

Wallaby gestured impatiently with one pudgy hand.

"I don't care if he's a saint or a highwayman. If he knows the woods and mountains of this territory, I want to speak to him. We've been going around in circles for three weeks because your damned peasants have eyes for nothing beyond their bloody turnip plots. Can you bring him to us?"

The innkeeper's brow furrowed doubtfully.

"That I do not think, milord. He visits here only when he desires, and you could wait weeks before he come again." He brightened perceptibly. "But I could lead you to his cave—it is not a long walk."

Wallaby heaved agonizedly out of his chair and began waddling towards the stairs, the bottle of Metaxa dangling loosely from one hand.

"All right, we'll leave at seven in the morning. Wake me at six, prepare a warm bath, and for breakfast fry me six eggs, coffee, some toasted bread, and a side of bacon." He cut off the innkeeper's protest. "Then kill the pig, I'll pay you for it. Seven o'clock." He nodded curtly to Deverish and hauled his bulk laboriously up the stairs.

Deverish sat hunched over his brandy for at least another hour, and the innkeeper was puzzled by the Englishman's sporadic bouts of smirking laughter. Yes indeed, he thought, savoring the words, do kill the pig. And you will pay for it, dear Marius, you will surely pay for it.

Deverish awoke after a restless night on a hard pallet-like bed and shaved painfully in cold water brought him in a chipped porcelain basin by the innkeeper's eldest son, a handsome boy in his late teens with tousled, coal-black hair, smooth olive skin, and the classic features of a young Homeric prince. He eyed the youth appraisingly for a moment, and then dismissed the thought. Later, back in Athens or elsewhere on the Continent, but not here, not now. He could afford no taint of suspicion, much less scandal—the stakes were too high.

Downstairs, Wallaby crouched over a three-week-old copy of the *Times* he had purchased in Ioannina, the last stage of their journey maintaining vestigial contact with the outside world. He had already polished off his breakfast, and looked up irritably as Deverish took his place at the table and accepted a steaming mug of harsh black tea from the innkeeper.

"Can't you ever be on time, man? I said we'd depart at seven, and seven it is, whether you've

eaten or not. Hurry up with that breakfast!" Panayotis, who had been hovering over Wallaby's shoulder, resignedly padded out to the kitchen, no trace of resentment on his face, and Wallaby immersed himself in the paper for a few more moments before hurling it to the table with a muted imprecation.

"Must know the damned thing by heart now," he growled. "I can recite King George's movements from morning to night, and throw in a verbatim report of the Kaiser's speech at Potsdam." He looked accusingly at Deverish. "If I'd know we'd be running about half of Greece on this mad chase of yours, I'd have taken some serious reading matter along."

Deverish's lip curled imperceptibly. Wallaby's idea of serious literature was the latest issue of the *Strand*, and the peregrinations of Conan Doyle's absurd fictional fabrication—or, on a more refined level, the muddled bleats of eunuchs such as George Manville Fenn, Dick Donovan and W. Clark Russell. For hours on the coach from Athens, Wallaby had rattled on with indefatigable enthusiasm over the latest literary excretions of these favored pygmies—all the while oblivious to the presence at his side of one who could burn his words into the ages if only freed from the material shackles binding lesser men and allowed to breathe, to move, to create. Once, at the very outset of the trip, when his plan had not as yet fully crystallized, Deverish granted Wallaby a second chance to become his patron and read the fool several of his best poems. Wallaby had listened abstractedly, finally nodding judiciously and patting Deverish on the shoulder. "Nice stuff, I'm sure, but I prefer poets who make themselves clear, like Kipling or Housman. All this agonizing over life and death is a bit deep for me. But keep at it, old boy, by all means keep at it." Wallaby had returned with evident relief to his copy of *Nature,* and neither of them referred to the subject again.

Under Wallaby's impatient eye, Deverish wolfed an indifferent breakfast of lumpy porridge and cold slabs of greasy bacon and then departed with the innkeeper for the hermit's cave. As the small party left the village and passed through the open fields of the valley, Deverish's spirits failed to lighten, although it was a cool, antiseptic morning, with a clean summer breeze rippling the air and scudding ragged tufts of cloud across a sky of the washed metallic blue found only in the Mediterranean. Deverish wanted Wallaby alone, high in the mountains, not on a hiking trip through the forest in quest of some half-crazed recluse, but he had waited this long, and could afford to wait a few hours or a few days longer.

A short journey it might be to the innkeeper, but for Deverish the trek appeared interminable, burdened as he was with both their hunting rifles and a rucksack containing rations and extra cartridges. For all his bulk Wallaby pressed on relentlessly through the fields and into the thick woods of hawthorn and birch lapping at the foot of the more lightly forested mountain slopes, his plump cheeks redder than usual from exertion, intermittently whistling bawdy tunes and pausing only for an occasional swift swig of brandy from his capacious silver flask. Deverish was consistently astounded and repelled by the man's insatiable appetite for liquor, and by the fact that it never exacted a toll the following morning, whereas his own four brandies of the night before had bequeathed him an aching head and churning stomach, tinged with the bleak edge of nervous despair always attendant to his hangovers. Wallaby, predictably enough, was in the best of spirits and insisted on regaling Deverish with his hunting exploits.

"Only thing I've never killed is a fox," he said as the old Greek led them through a copse of silver birch and into a small sun-swept clearing at the foot of a rugged, barren hillside. "No sport there, the poor terrified beast doesn't have a chance, run to ground by a pack of bloody baying hounds and a hundred horsemen. A coward's pastime, if you ask me—I always give my game a sporting chance." He pulled out his flask again and took a quick, slobbering gulp, wiping his mouth with the back of one scarlet hand. "Whatever else they say about that fellow Wilde, he had the fox hunter's number: 'the unspeakable in pursuit of the uneatable.' Eh?" Wallaby burst into a sudden peal of laughter and slapped one meaty thigh, as if the words had been his own spontaneous observation. Deverish merely grimaced—there was something blasphemous at the words of Wilde dribbling from the flaccid lips of this great oaf—and joined the old Greek, who had halted in the middle of the clearing.

"The holy man lives here," Panayotis whispered reverently, as Wallaby lumbered to his side, "in that cave there, milord." He pointed to a black gash in the pitted face of the hill. "I will go on ahead and see if he will talk with you." Panayotis dropped his pack to the ground and extracted two bottles of wine and a sack stuffed with flat bread, dates, *feta* cheese, and pungent black Calamaris olives—it had been decided that a bit of discreet bribery might lubricate the priest's tongue—and entered the cave.

Wallaby and Deverish stood together without speaking in the clearing for several moments after

the innkeeper left them. Deverish was restless and nervous, and the insistent glare of sunlight pained his eyes. He was suddenly conscious of the intensity of bird song in the surrounding trees, and as he looked closely he saw hundreds of different birds arrayed in the branches, their voices beating out to serenade the men in the clearing. Under ordinary circumstances it would have been a pleasant scene, but now the noise was too orchestral, too insistent, and Deverish found it vaguely disturbing, if not actively tinged with menace. There were too many birds for such a small clearing, and he had a tingling sensation of their *awareness,* as if their tiny eyes were all fixed on his, the jarring cacophony of birds song directed at him alone. He jerked around to face the cave, sweat springing out on his brow, just as Panayotis emerged and waved them to enter.

Deverish followed Wallaby and the innkeeper into a dank warren littered with scraps of food and fouled linen. The air was so noxious Deverish almost choked, and abruptly he experienced a wild impulse to flee back into the sunlit glade. But then he saw the man huddled in one corner, and his artist's fascination with the grotesque dispelled all fear. The hermit was tall, at least six feet four, and incredibly filthy, his bony frame draped in the tattered remnants of a *soutane,* a huge, hand-carved wooden crucifix dangling from his neck. His hands and feet were polished black with a solid patina of filth, and greasy, tangled dark locks fell below his shoulders. The hermit's beard was a living thing, a coiled snake dangling to his waist, encrusted with grime and particles of food, but his teeth, when he smiled to greet them, were startlingly white, and his eyes were the clear light blue of the bleached sky outside. The man should have been repellent, but even to Deverish he was strangely impressive. He did not rise but remained crouched in the corner, extending both hands in a mute gesture of welcome. Deverish wondered if they were expected to sit on the filthy floor of the cave, but Wallaby merely squatted on his haunches before the old man and motioned Deverish to explain their mission, while Panayotis hovered edgily by the entrance, occasionally casting awe-struck glances at the hermit.

Deverish, remaining on his feet, quickly told the priest that he and Wallaby had heard reports of a unicorn surviving in these remote hills, and wished to verify them. The old man was silent for a long moment, his eyes cast down and pensive, before he looked directly up at Deverish and spoke softly. Deverish couldn't follow him at first, but finally he realized the old man was speaking classical

Greek, the words pure and clean as a mountain stream.

"But are not unicorns mythical beasts, stranger?" The old man employed the word *barbaros,* a proper classical usage, but with a faint underlay of emphasis that vaguely disturbed Deverish.

"Who can say for sure what is myth and what reality, father?" he replied carefully, the ancient words creaking with disuse on his tongue. "We seek only truth."

The old man's smile faded, and he sighed. Deverish watched with loathing as a louse crawled from the tangled mat of hair under his armpit and struggled laboriously along the tattered remnants of one sleeve.

"If you seek only truth," the hermit continued, "then I shall answer you with truth. But first I must know more of your purpose in coming here. Is it only the search for knowledge that impels you?"

The startlingly blue eyes fixed on his, and suddenly the facile words caught in Deverish's throat. He could only nod feebly, and the old man sighed again.

"I can call no man a liar, because there are too many truths. So to answer you, yes, there is such a beast in these hills, the very last one in the entire world. He is old and tired, and sleeps much in the sun, but sometimes we meet and share our thoughts. He feeds on goodness, and that is why he is old and infirm, and soon shall die, for it is a meager diet today."

The old priest was obviously mad, but Deverish continued in order to keep Wallaby's flickering interest in their quest alive, for with the sportsman's intuitive flair, the fat Englishman had sensed the spoor of his elusive quarry and now was glancing back and forth at the two of them like a spectator at a match of lawn tennis, hoping by sheer intensity of will to fathom the alien words.

"Where can we find this beast?" Deverish asked, choking back a smile. The momentary sense of discontinuity he'd experienced earlier had dissolved, and now he felt only contempt tinged with pity for the pathetic demented fool before him.

"He lives on the slopes above Thanatakis mountain, five miles to the south of here. His legs are weak, and he seldom ventures far from his waterfall. He will not flee from you, for he is very tired and does not know fear."

Deverish turned to Wallaby and gave him a quick digest of their conversation, registering with satisfaction the glint of excitement in the other man's eyes. Wallaby pulled himself to his feet and started towards the cave door, but before he could follow, the hermit's hand shot out and clutched at his sleeve. Deverish noted with disgust that the finger-

nails were long, talon-like, and reamed in filth. He tried to shake his arm free, but the old man's grip was inordinately strong, and suddenly the deep, distant eyes fastened on his, and again Deverish felt a vague disorientation, a falling away from reality.

The old man spoke softly, never looking from Deverish's face.

"You are here to kill the unicorn, are you not?"

For one irrational moment Deverish accepted the reality of the hunt as passionately as Wallaby. The priest repeated his question quietly, and Deverish did not have the strength to lie. He felt suddenly nauseous, and the hermit's eyes were like twin stakes impaling him. He nodded weakly, and the old man shook his head and clasped his one free hand to the wooden crucifix about his neck.

"I had known you were coming for some time now. The birds told me."

His grip tightened on Deverish's arm.

"I cannot stop you, for these things are ordained," the old man whispered, "but I must tell you this: you go to slay the most precious creature left on earth."

He paused, and Deverish again felt the eyes tearing into his mind like arrows. Wallaby called something impatiently from the doorway, but he could not move.

"Listen to me, my son," the priest continued, the ancient words falling with liquid precision from his lips, "this beast you seek to slay is the last guardian of man's innocence. Unicorns live on thoughts of beauty, and the radiance of their souls has fallen like sunlight on the world for thousands of years, even before the Old Ones were dreamed into substance on Olympus." The priest's voice fell even lower and the mad eyes filmed with grief. "But the day Christ died on the cross the King of the Unicorns took it upon his race to suffer penance for the act, for otherwise God's wrath delivered on the heads of man would indeed have been terrible. And so on that day, while the heavens shook and the earth trembled on the brink of chaos, he ordered all the females of his race to die, and in great silver flocks they mounted the heights of Thessaly and threw themselves to death on the crags below, singing the ancient songs as they fell. Their voices reached the ear of God, and the tears of Christ rained upon Greece for three days and three nights, and beauty crept into the dreams of everyone."

He is mad, thought Deverish feebly, why does he keep looking at me, why does he not let me out into the sunlight?

"Since then," the priest went on, "the remaining unicorns have died one by one, always by the

violence of man's hand, because Christ in his love has spared them pain or illness or suffering or death, save that inflicted by his own tormentors. And with the death of each unicorn over the centuries, something of beauty, something of innocence, has gone out of the world, and a candle has been extinguished in the heart of every man, and the darkness has grown. This poor tired beast you plan to kill is the sole custodian of that ancient, guttering flame. When he is slain the last light of God's mercy is snuffed out, and even children's hearts shall become soiled, and wonder will die slowly, strangled until it becomes only a word, and innocence shall never return. A vast darkness hovers over the earth, peopled with the horrors of the apocalypse, and this beast is man's last solitary light. So God intended it, and so shall it be. Go and destroy him."

The bony fingers released Deverish's sleeve, and he was free. With a wrenching effort he staggered forward and rejoined Panayotis and Wallaby. The priest's eyes followed him, but at a slightly wrong angle, and it was only then that he realized that the old man was blind.

As Deverish stumbled into the sunlight, Wallaby looked at him inquisitively.

"What was the old beggar whispering to you about just now?" he enquired, and then scowled as he saw Deverish's face. "You look white as a ghost, man. Have a swig of cognac, it'll do you good."

Deverish accepted numbly, noticing with clinical detachment as he raised the flask to his lips that his hands were trembling. His legs felt like jelly, but he followed Panayotis and Wallaby across the clearing, and it was only when they reached the edge of the copse of white spruce trees that he realized all the birds in the glen had fallen silent.

Wallaby was anxious to set out at once on foot for Thanatakis mountain and the lair of his quarry, but Panayotis dissuaded him.

"For such a trip you need pack animals, milord," he protested. "I have a cousin with a farm less than a kilometer away and I will go fetch mules and more supplies. While I am gone, rest here and eat so you will be strong for your journey."

Wallaby negligently tossed him a five hundred drachma note to pay his cousin, and the old Greek scampered off gleefully. Deverish had little desire to remain in such close proximity to the madman in the cave—he could still feel those dead, empty eyes fastened on him as if they could read his soul—but the experience had been so unsettling and had so jarred his already taut nerves that he could not have continued in any case,

and now he eased himself gratefully to the ground at the foot of a birch, the tension gradually seeping from his body until he lay in a luxuriantly languid stupor in the dappled pool of shade beneath the tree. Wallaby lay stretched out beside him, gorging on a packed lunch of cold lamb, goat's cheese, olives and brandy, but Deverish had no appetite.

Panayotis returned within the hour, just as Deverish had begun to doze, leading on a tether two bony mules that appeared barely capable of supporting Deverish's weight, let alone Wallaby's twenty stone.

"My cousin let you keep these for two days, if you wish to stay overnight, but he say you should come back before sunset because the spirits of the old gods still walk the high hills at night and are sometimes thirsty for Christian blood." He crossed himself and then grimaced self-consciously. "My cousin is superstitious, of course, milord—he is just an uneducated man. He speaks no English."

Wallaby ignored the Greek's chatter but looked quizzically at the decrepit mules.

"Why have you brought only two animals?"

Panayotis' eyes shifted from Wallaby's and he shuffled his right foot nervously.

"Milord, it is impossible for me to go with you. You understand, there is the inn, I must be there in case other travelers come . . ."

"The inn!" Wallaby roared, his face flaming, the cheeks puffing like twin blood sausages. "That flea-bitten hovel! Your only customers are a few pig farmers guzzling your foul pine-cone wine, and there are no travelers in this area except ourselves. You're our guide, man, albeit a paltry excuse for one at best." His voice dropped and he looked almost imploringly at Panayotis. "Without you we'll never find this place the priest spoke of. Surely you will not desert us now, just when we're so close to our goal?"

Panayotis was shamefaced. "Perhaps I can lead you to the foot of the mountain, milord, but no farther." The faintest edge of a whine tinged his voice. "From there you will have no trouble finding this place by the waterfall of which you speak. But I cannot go up the mountain with you."

Panayotis cast a quick, fearful look over his shoulder at his holy man's cave, and Deverish realized with a surge of elation that the innkeeper had somehow picked up the old priest's apprehensions about their journey and was reluctant to be further involved. Deverish struggled lest his face register his joy, for this meant that at last he would be alone in the mountains with Wallaby.

He called Panayotis aside, cutting off Wallaby's sputtered pro-

tests over the guide's desertion, and spoke swiftly in colloquial Greek, striving to impart an earnest ring to his words.

"My dear Panayotis, I wish you would accompany us all the way up the mountain. My friend does not like to admit that he is no longer a young or agile man, and a climb like this could prove too much for him. With the two of us along the chances of any ill befalling him lessen appreciably."

He watched the Greek's face with wry amusement as servile respect for Wallaby struggled with superstitious awe of his cherished holy man in the cave. As Deverish had known, the latter conquered.

"It is impossible, *Kyrios*," he muttered miserably, looking down at his feet. "I do not know why you have come here, but I cannot accompany you beyond the foot of the mountain." He looked up anxiously. "Perhaps you can convince milord to call off this trip, since you feel he is not strong enough for it." His eyes brightened. "You come back to the tavern and I will prepare a fine meal, with much wine and brandy. He forget about the mountain then, no?"

Deverish spoke with quiet sincerity. "No, Panayotis, I am afraid he will not forget. We must go on. I only pray he will not injure himself again, as he has in the past on mere piddling slopes. But you have done your best, and I am grateful for your presence on the initial stage of our journey."

As Panayotis dejectedly led the mules from the hermit's glen, Deverish reflected with fierce elation that it would come as no surprise to the old innkeeper when he returned alone.

The journey took the better part of the day, and when they finally reached the foot of Thanatakis mountain, Deverish was soaking with sweat. Wallaby's scarecrow mule had miraculously accommodated its rider's bulk, although the beast's belly sagged and nearly scraped the ground as they proceeded up the lowland slopes, luxuriantly carpeted with wild flowers, and reached the more rugged terrain leading to the Kanakatos mountain range. Unable to adjust comfortably to the jarring gait of his beast, Deverish had walked most of the way, and by the time they approached the mountain his feet were numb and his legs moved with the jerky, automaton stride of a mechanical toy. The cool, pine-scented air was honied with bee song, and the countryside was a study in brilliant color, its blues and greens scraped fresh from a painter's palette, but Deverish stumbled on obliviously, anxious only to reach their destination and to be alone at last with Wallaby.

The climb had been uphill all the way, but never steeply, and it was difficult for Deverish to imagine they were really in the moun-

tains unless he assayed a glance down into the valley and saw the cluster of rude cottages in Panayotis' village, as if through the wrong end of a telescope, the inn itself a dollhouse study in miniature. Then Panayotis finally halted the party before a small gorge slashed into the barren face of the hillside. The sky was paling to rose and a breeze tinged with evening coolness lightly stirred the pines. The old Greek, anxious to depart, doffed his hat obsequiously to Wallaby.

"Whatever you search for, milord, I hope you find. I return now to the village to keep your rooms in readiness for your return." He glanced anxiously at Wallaby, who in fact had weathered the journey far better than Deverish and was now breathing in the cool air with greedy gulps, and added in humble benediction: "May God be with you both."

"Well, Deverish," Wallaby bellowed as the Greek departed, slapping his hands together in eager anticipation, "you're the unicorn expert. What now? Is he a nocturnal beastie, or shall we make camp and wait for morning?"

Deverish looked around him, at the empty gray crags thrusting desolate fingers into the darkening sky, and then let his eyes travel down past the rocky hillside, bare save for a few sparse pines, and on to the thickly forested valley below. Once Panayotis was well on his way there would be no other human being within miles of them, but this business was still best done at night.

"It's best we fortify ourselves with a light meal and proceed forthwith," Deverish told him. "I fear my expertise is less than you imagine, but once in the beast's territory I advise we strike quickly, lest he become alarmed by our presence."

"Good, good," Wallaby cried, "the sooner the better! This shall be a splendid hunt, my dear Deverish, a positively splendid hunt."

His eagerness dissolved abruptly, the beetling eyebrows knitted, and he scowled.

"If, of course, that holy man of Panayotis' isn't just a lunatic amusing himself by inventing tales to send us traipsing down the garden path."

"My dear Marius," Deverish swiftly appeased him, "I can assure you the old priest knows this countryside as no one else, and claims with certitude to have seen such a beast. Wrong he may conceivably be, but of his sincerity there can be no doubt."

And thank God, Deverish added fervently to himself, that this tiresome child's charade shall soon be done for good and all.

His words served to rekindle Wallaby's enthusiasm, and they both wolfed a quick meal of goat's

cheese and dates. Deverish's appetite had returned; the doubts and fears that inexplicably assailed him in the presence of the old hermit had dissolved like mountain mist the moment Panayotis departed, and he was now exultant in anticipation of his final triumph.

As the sun passed below the pines and darkness settled gently over the peaks, Wallaby and Deverish tethered the mules, left behind the better part of their supplies, and proceeded through the gorge and up a hilly slope surmounted by a small clearing sentried by a solid ring of stunted spruce trees. The carpet of grass in the glade had been beaten flat, obviously by the feet of living creatures, and was curiously free of wild flowers and weeds, as if cleared by the pruning hand of man. Deverish looked about uneasily for a moment, but nothing moved in the foliage, and the light of the full moon illuminated the hillside in photographic clarity.

Wallaby walked ahead gingerly, for all his bulk still nimble on his toes, clutching his Mauser .465 in both hands, while Deverish's own rifle remained slung negligently over one shoulder.

"Go softly now," Wallaby murmured, his eyes bright. "This is our quarry's terrain and one careless move may warn him off for good."

As they passed through the glade, a faint murmuring broke the preternatural stillness, which Wallaby swiftly traced to a small stream meandering along the rocky hillside.

"You said the priest spoke of a waterfall," Wallaby whispered, and Deverish nodded contemptuously. It would be over soon now, but to savor fully his victory he must play the game out a bit longer.

They followed the stream for a few hundred more yards, as the whisper of running water rapidly swelled to a muted thunder. Deverish heard Wallaby's grunt of excitement ahead as they passed through a small grove of spruce trees and found themselves in another clearing facing on a steep ravine, where the stream ended in a fôaming miniature white waterfall churning gently over a brief expanse of rocky hillside to form a tiny pool of clear crystal water.

Wallaby held Deverish back and scrutinized the area closely before scrabbling down the cliff side.

"Look!" he exclaimed, pointing at some imprints in the moist earth by the edge of the pool. "Hoofprints!" Wallaby bent down to look closer, and his voice sang with excitement.

"Cloven hoofs! And no deer this far up! We've found him!"

Deverish held the rock he'd picked up as they passed through

the gorge lovingly in his right hand, its roughly pitted surface sensuously caressing his palm.

"Deverish, my dear fellow," Wallaby cried exultantly, still on his knees, "you were right after all! I never should have doubted you." He turned his beaming face towards Deverish, as the younger man had hoped, and the eager, innocent child's eyes blinked only once as the rock struck down into his forehead, the jagged point splitting open the great ruddy face from hairline to the bridge of the nose, and exploding a slimy pudding of brain matter onto Deverish's hands. Wallaby died instantly, but Deverish was impelled to strike and strike again, until nothing remained of the face but a ripe pulp the color and consistency of the scooped innards of an autumn pumpkin. Finally, exhausted and alternately laughing and sobbing, Deverish rose to his feet and with considerable difficulty dragged the great body back across the clearing and to a steeper cliff face plunging into a black ravine at least three hundred feet deep, and at the bottom studded with needle-like crags.

He extracted Wallaby's billfold from the inside jacket pocket and riffled tenderly through the sheaf of bills, almost five thousand drachma, and another thousand back at the inn where he, as Wallaby's grief-stricken comrade, would soon have access to it.

Deverish tumbled the bloated body over the edge and listened with satisfaction to the seconds that elapsed before it landed with a soft plop on the rocks below. It was done.

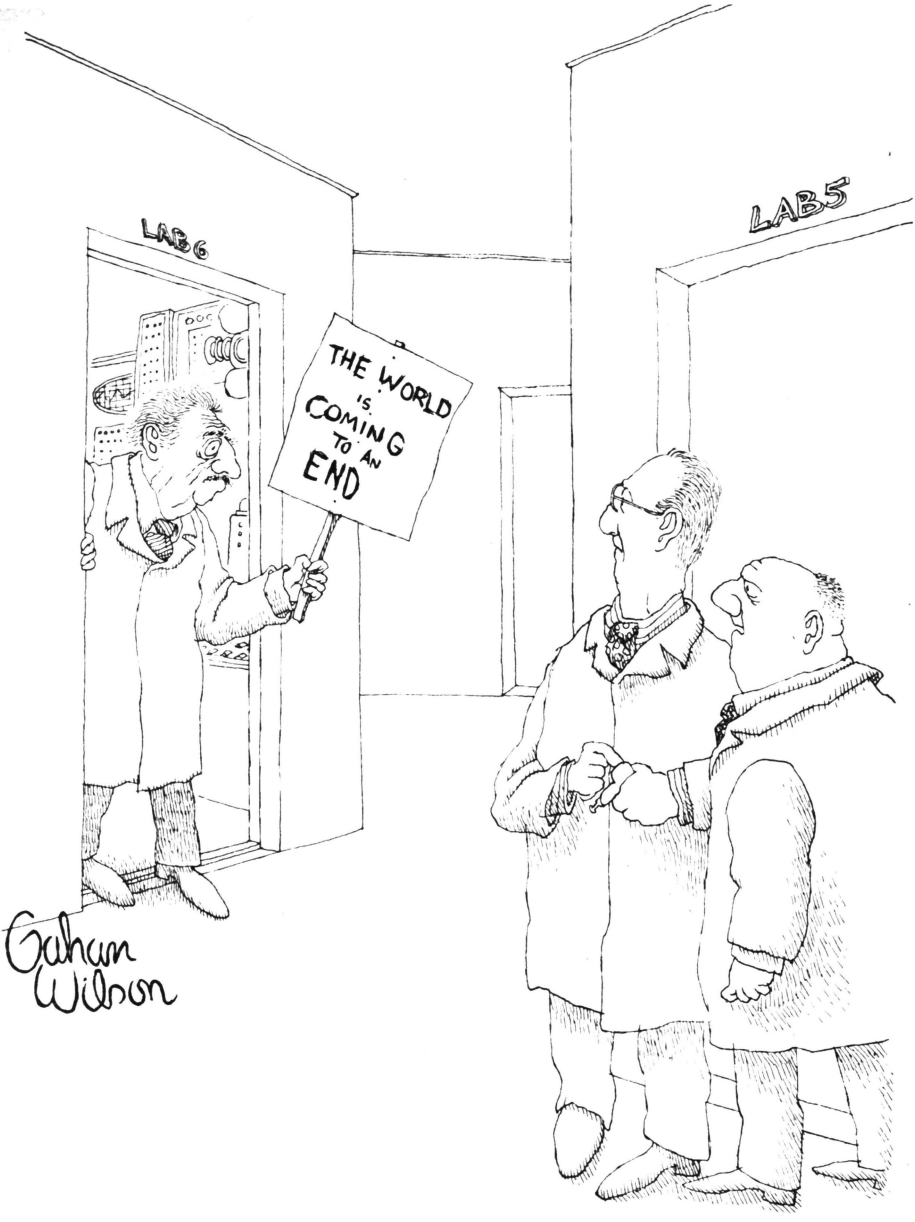
Deverish turned, picked up his rucksack and rifle, and as an afterthought tossed Wallaby's gun over the edge of the ravine, sighing deeply as his lungs drew in the cool night air, tinged with the clean, heady scent of pine. He looked out over the ravine for a long, final moment and was about to light a cheroot before returning to the rough camp at the foot of the gorge, when he experienced a disconcerting sensation of eyes

fixed hotly on the back of his neck. It was absurd, of course, an obvious trick of nerves, but he turned and sighed with relief when he saw there was nothing.

Deverish was halfway back towards the gorge when he felt the same prickling sensation again. He swung around, annoyed at his ready indulgence of such fancies, and a scream gurgled silently in his throat. Less than five feet away a silver shadow gleamed in the moonlight, its contours indistinguishable save for two huge, luminous eyes looking imploringly into and through his, just as the old priest's had, and registering incomprehension tinged with a pity more terrifying than any accusation. Deverish jerked the rifle to his shoulder and convulsively snapped off three shots.

The creature made no sound but sank to its knees, dipping a slender spiral horn to the earth as if in salutation, or relief. Deverish covered his eyes with his hands, but when he finally stopped trembling and looked again, there was nothing on the ground before him; and when he staggered forward and closely scrutinized the spot where the thing had been, nothing remained but a tiny mound of silvery dust, which the breeze quickly snatched away in coruscating swirls that sparkled oddly in the moonlight.

Deverish returned, shaken, to the camp, the money in his pocket momentarily forgotten, as the wind grew in intensity and howled through the trees with manic frenzy before waning at midnight to a gentle breeze whispering through the forest like a sigh. Across Europe, in that summer of 1914, birds cried in the darkness, and new dreams crept into men's minds as old dreams died; while four hundred and twenty miles from the mountains of Thessaly, in the city of Sarajevo, the Serbian nationalist Gavrilo Princip passed a restless night loading and unloading his automatic pistol.



"I don't like the looks of that, at all!"

BOOKS

IT WAS DAMON KNIGHT WHO pointed out some time ago that it is difficult for people in science fiction to achieve very much objectivity . . . the field is small and most of the same people wind up wearing various hats: critic, editor, writer, anthologist, and so on. I don't recall, however, whether he had any suggestions for remedying this condition. The obvious one would be to enlarge it, but since one of the pleasant advantages of the field has been just that compactness, that would be the too easy answer that would make things difficult. There are, when you come right down to it, only some 500-600 people in all of this country involved in the writing, editing and publication of science fiction; and when you consider that this population is reaching an audience somewhere upwards of half a million, you can see that per capita we are doing very well . . . better than detective writers anyway. I doubt if fully two thirds of us would give up our limitations for more abstract advantages.

On the other hand, the condition that Damon Knight has pointed out also makes it difficult to achieve objective book reviews, and this is more to the point. The man whom I review today may be in a position to buy my manuscript tomorrow, and so on. So much of s-f book reviewing, then, becomes, like modern Soviet socialist realism, an exercise in paradigms and objective correlatives. *What did he really mean? What was he trying to say?*

This is not a prelude to a statement of disadvantage or a request for interlinear reading. The reviews which follow will be handsomely objective within the rigidly coached limits of the reviewer's subjectivity, of course. But it is an admonition, dear readers, to consider our problems. We so earnestly want—we writers, that is—the field to flourish, to prosper, to increase, to give higher royalty rates, and so on. It is very much in our interests, therefore, to see that most of the work published is *good,* worthy of these happy outcomes. But it isn't, or as is the case with everything reviewed below, it is usually only good enough to make the perception of deficiency easy. What a

shame! What a pity! What a loss! And yet, as fiction, it still beats almost everything around. What's the answer?

THE BLACK CORRIDOR (Ace Special, 95¢) is a serious novel by Michael Moorcock, who is, of course, the author of the Nebula Award-winning novella (which was subsequently expanded to novel length) BEHOLD THE MAN, and as the editor of *New Worlds* has probably been the most salutary single editorial influence on this field since another great editor, back in the 1940's. One is therefore entitled to read the novel with anticipation. Yet it is not good. It is really not at all good. It reaches far enough to make this clear.

THE BLACK CORRIDOR takes place on a spaceship which is being hurled clear from a rotting, corrupt and dying England toward the nearest available star system. The time is 1985 or thereabout, and a hardy, related group of overurbanized Britishers are trying to get out of the world before it gets out of them. During the course of the novel, all members of the party but one are sleeping. As in the ploy in A. E. Van Vogt's PROXIMA CENTAURI (which, irrelevantly, I have always thought a better piece of work than its obvious inspiration, Heinlein's UNIVERSE), all members of the party have been drugged into somnolence except the caretaker who sets the controls, watches out generally for the state of the sleepers, and engages in long retrospective seizures during which Moorcock is able to funnel in expository material to the degree of some 60 percent of the book's length. This caretaker, it seems, is an erstwhile toy manufacturer, and the ship was invented for him by a crazed but lovable old engineer involved with the firm.

Well, this is all to the good: we may have made the Moon an offshoot of B.B.D. & O., but at least in science fiction there is still a place for the cracked entrepreneur, the pocket-adventurers. The trouble is that the book sits on a highly contrived and deliberately improbable situation rather loosely, mediating between a queasy surrealism (the protagonist is seized by hallucinations during which the sleepers seem to awake and talk to him, not always dispassionately) and that kind of ironic realism which may be the key to any understanding of, for instance, J. G. Ballard's work, but does not work well within the confines of what is obviously meant to be an allegory.

The novel is circular in that the condition of the protagonist is the same at the end as at the beginning; he is only somewhat shaken by the hallucinations and less

sure that a flight from the decaying continent is the clue to the achievement of inner space. One of the quotes on the back jacket of the book notes that the signatory obtained "five or six real surprises" during the reading of the book, and I suppose that this is meant to refer to the fact that the hallucinations, time and again, turn out to be exactly that. I do not think that I am taking anyone's fun away by saying this, and I remain convinced that someday Moorcock will write a substantial novel, fully worthy of his pretensions and our expectations.

DAMNATION ALLEY (Putnam, $4.95) by Roger Zelazny is a double-length expansion of a novella which ran in the September, 1967, issue of *Galaxy,* and there ain't much difference, sorry to say. The flaw of the novella was that it had no characterological interior or true sense of pace; and instead of concentrating his novelization on those areas which might have done some good (like ironic counterpoint), Zelazny has simply souped up and extended the action; and, if I don't miss my guess, he put in a wee bit of sex. On balance, it was an interesting novella converted to an unfortunate novel.

It deals once again with post-apocalyptic America, populated at both coasts by technocrats and terrified politicians who live in enclaves, totally in fear of the vigilantes, mostly on motorcycles and, by God, with *women,* who are tearing up the midwest. The hero, one Hell Tanner, is precisely such a vigilante who is enlisted by the East Coast to stop a plague by bringing back from the West Coast the priceless but unavailable drugs that will stop it. He goes out West and he comes back with the drugs. In the process he stops being a vigilante and learns to be a humanitarian, but the way to paradise is littered, of course, with corpses, and Tanner becomes one himself, collapsing Ghent-to-Aix style at the city monument as he hands over the drugs. He is memorialized by a grateful citizenry, who, I think, did somewhat better by him in statuary than Roger Zelazny has done in this book. It is a mechanical, simply transposed action-adventure story written, in my view, at the bottom of the man's talent; but the way of flesh being the same as the way to paradise, it will probably sell like hell.

But it leaves one point yet to be noted, and unfortunately it is not mine but P. Schuyler Miller's. This book is further proof of the fact that Zelazny never repeats himself. He has been bad, he has been good, he has been great, he has been awful, but he has never been the *same.* The fact that the man is still in there, moving past easy choices and mechanical reit-

erations is of itself a slash of hope. Seen then as some kind of transition point toward the work which Zelazny is going to do, DAMNATION ALLEY stands up, perhaps, a little better or, at least, stands in perspective.

ORBIT 5 (Berkley 95¢) is, by coincidence, the fifth of Damon Knight's semiannual series of original short stories which have in less than three years already contributed three or four Nebula winners and any number of runners-up to the field. ORBIT 2 and ORBIT 3 remain the books you would give an intelligent but prejudiced friend if you wanted to show him science fiction. ORBIT 4 wasn't quite so good, but then who of us are always so good? ORBIT 5, however, I am not so terribly happy with, and I am not sure why this is so.

It has the names—Ursula LeGuin, Kit Reed, Kate Wilhelm, Gene Wolfe, and Philip Latham have all contributed decent work to previous volumes in the series—and it has the same obvious care and skill on the part of the editor, and it even has a new fantasy by Avram Davidson that is something completely out of the usual run of the man's work and pretty interesting. But it doesn't, somehow, seem to be at the same high level of ambition or accomplishment as the earlier volumes, which might lead a certain kind of reviewer to say that the editor has lost interest. I don't think he has, however. There's probably better stuff in the inventory, and just as magazines often put out lousy issues, so can hardcover series. Magazines, however, don't get reviewed. (This may be the one and only time I'll ever have the opportunity to say this in public, so let me say it: magazines *should* be reviewed. They should be reviewed in the professional magazines themselves and in such a way as to keep them on their toes. They remain as they have been for forty years, intrinsic to science fiction, yet existing in a critical near-vacuum, getting commented upon only by allusion when work which has appeared in them comes out in book form.)

A few comments: Kit Reed's "Winston" has all of the lady's style, facility, and knack for instant horror, but unlike most of her previous stories, it sits upon a premise—this is an old fault in science fiction—which would stroll away rapidly if released, and manages only to trivialize some very serious issues . . . another old fault in the field. "Look, You Think You've Got Troubles" and "Paul's Treehouse" by Carol Carr and Gene Wolfe, respectively, are both games. In one, civil rights and, in the other, apocalypse have been reduced to cartoon level, which is not, when you think about it, necessarily a bad

thing except that civil rights and apocalypse simply don't go away that easily. The Davidson fantasy, which has to do with Minotaurs on highway 301, or somesuch, is almost worth the extremely tricky technique; and "The Big Flash," by Norman Spinrad—

Well, how about "The Big Flash"? It is by a young writer who has, only in bits and stages now, begun to fulfill his promise, but it is safe to say on the basis of this story that Spinrad has virtually gone all the way now. In its 8,000 words it has all the compression, drive and metaphor which BUG JACK BARRON did at 12 times the length, but here, for once, it all comes together: structure, vision, characterization. It is not only the best story in the book, the best story in all of the ORBITS, it is one of the two or three best stories written and published anywhere in the past five years, and on account of it alone, ORBIT 5 is anything but a loss.

"The Big Flash" deals with a shocking and brilliant social insight—that totalitarianism is the worm nesting comfortably in the beating heart of the libertarian apple—in a structure which, at last, makes clear the classic difference between predictability and inevitability in fiction. The story knows its way so surely—and so does the author, which is not quite the same thing—that the horror is only magnified by its total visibility. The last pages of this story may be one of the strongest experiences available in modern American fiction.

Well, not such a hot way of getting at it. The jacket blurb says, "Norman Spinrad combines underground rock music and atomic warheads to create a nightmare vision of tomorrow," and that's maybe better. In any event, read it.

Doubleday's annual volume, NEBULA AWARD STORIES FOUR ($5.95), edited by Poul Anderson, contains "Dragon Rider" by Anne McCaffrey, the Nebula novella for 1968; "Mother to the World" by Richard Wilson, best novelette; and Kate Wilhelm's "The Planners," best short story. Anderson has also included Terry Carr's "The Dance of the Changer and Three," James Gunn's "The Listeners," and "Sword Game" by H. H. Hollis, runners-up in the various categories. There is an introduction by Willis E. McNelly, Professor of English at Claremont State College in California, on the science-fiction novel in 1968. The essay, in addition to being a literate and fascinating piece, can be assumed to be a kind of tip-of-the-hat to the Nebula novel category, the winner of which, Alexei Panshin's "Rite of Passage," could not, of course, be included in the award volume for reasons of

length. It is a sound book, at least in its statement of where the SFWA (Science Fiction Writers of America) stands at the moment, what they, as professional writers, consider their outstanding work, and by inference where they hope science fiction is going. As A. J. Budrys said in *Galaxy,* whatever the defects of the Nebula Awards, no one who has taken one thinks of it as being cheap, and everyone who has won has been somewhere.

Yet—not surprisingly with this reviewer—the book is a disappointment, a disappointment that cannot, of course, be ascribed to the editor, who is only doing the job on behalf of the SFWA in assembling the material, but must refract back to the organization itself. Simply stated, if the work herein is the best that professionals believe science fiction can produce in the late 1960's—and so the very existence of the book attests—then the field is still in trouble because it is, at best, dealing well now with themes that were dealt with badly in the 1940's. But the themes are the same, the techniques only refined, the conclusions only subtler.

These are good stories, but even the writers, I think, would attest to the fact that better work was published in 1968, if not by others, then by themselves. As a matter of fact, Kate Wilhelm's "The Planners," while not a bad piece, is distinctly inferior to two or three other stories in the 1968 collection, "The Downstairs Room," from which it was drawn. Similarly Anne McCaffrey has published work a good deal more compressed and disciplined than what goes on in her dragon stories. But, as Mrs. McCaffrey has pointed out, people do *like* dragons, and the idea of psionic dragons tripping around JWC's terrain is so amusing as to be in itself possibly worthy of an award.

But, of course, awards do not necessarily go to the best work but only that on which a strong consensus can develop, and that, almost by definition, will be work that bulks into the middle ground, somewhere between the poles which exist, as in all other organizations, in the SFWA. Perhaps the reviewer's heart is, after all, dribbling once again down his sleeve. He freely confesses that work of his own was nominated for but did not win a Nebula in 1968 and goes further to say that he would have accepted with pleasure an award which some mere ten months later he now finds questionable. But at least the prejudices and the pain are right out there in the open, standing side by side with what, hopefully, is the sense as well.

In any event, Richard Wilson's "Mother to the World" is another post-apocalypse Adam-and-Eve story in which Adam is a gifted

and intelligent man and Eve an attractive, wistful, devoted moron with an IQ of 60 or so. The story turns on two factors: (a) that these people can not only co-exist but also love, and it is only the pre-apocalypse world which made morons inaccessible; and (b) that the children turn out to be of "normal" intelligence, a point which would seem, by implication, to be a direct contradiction of the first but which makes the story no less moving. It *is,* let's face it, quite moving, and handled cleverly. Richard Wilson would have to be a very good man to have written this story in this way. Terry Carr's story, which incidentally finished second in the short-story category and almost won the Hugo as well, is indeed a staggering handling of total *alienness,* hacked up only a little bit at the end and probably the best thing that Carr has ever published, which is quite good enough. By becoming a full-time editor, he has enriched the field in one way, while reducing it in another. "Sword Game" and "The Listeners" are perfectly competent "traditional" science fiction which were distinguished runners-up but which were, I suspect, included more for reasons of length than otherwise. I miss Brian Aldiss's "Total Environment" and Robert Taylor's "Idiot's Delight," also 1968 runners-up which, perhaps, have a good deal more to do with the 60's (and beyond) than any of the work in here.

But it's not a bad collection, and the McNelly introduction, one of the first detached critical essays on science fiction by an academician of high scholarly standing and great common sense is, in itself, worth the game. McNelly thinks that it is high time for science fiction to begin to deal with common realities, and so do I, but he says it a good deal better, and that's fine.

McNelly's introduction, which was not as taken with the novel award winner as the SFWA and which said so, ran into a few difficulties prior to publication. Certain people in the SFWA, I am given to understand, felt that it was "bad for the field." But McNelly, as an outsider, was not concerned with "better for the field" or "worse for the field" but simply did the *necessary,* which is best of all.

It is surely time that we did the necessary, but all 400 of us science-fiction writers interpret the "necessary" in individual ways, of course. We can only hope that somewhere on the common ground, if not in great enlightenment, there is some interesting writing, which bodes better for the field in the long run anyway, at least to those of us who, for some capricious reason, think that writing is still important.

—BARRY N. MALZBERG

Most of Theodore Sturgeon's work has been about love; most of Harlan Ellison's fictional visions have been dark ones. Almost all of both authors' work has been intensely personal. Their collaboration might have turned into a different-faced coin that is flipped and lands compromisingly on edge, but fortunately, both writers are too good for that. The coin has been melted down and remolded, and here is the fascinating result.

RUNESMITH

by Harlan Ellison and Theodore Sturgeon

(Dedicated to the Memory of Cordwainer Smith)

CROUCHING THERE IN THE darkness on the 102nd floor, Smith fumbled for the skin-bag of knucklebones. Somewhere down below in the stairwell—probably the 95th or 96th floor by now, judging from the firefly ricochets of their flashlight beams on the walls, coming up—the posse was sniffing him out. Soundlessly he put his good shoulder against the fire door, but it was solid. Probably bulged and wedged for months, since Smith had made the mistake.

He was effectively trapped in a chimney. The dead stairwell of the carcass that was the Empire State Building, in the corpse that was New York City, in the mammoth graveyard he had made of the world. And finding the only escape hatch closed off, he reluctantly fumbled at his belt for the skin-bag of knucklebones.

Smith. First and last of the magic men. About to cast the runes again.

The posse had reached the 99th floor. If he was going to do it—terrible!—he had to do it now. . . .

He hesitated a second. There were fifteen or sixteen men and women in that pack. He didn't want to hurt them. Despite their slavering hatred, despite their obvious intention, he was reluctant to call into effect that power again.

He had done it before, and destroyed the world.

"He's gotta be up there," one of them called down to the rest of the pack. "Now we got 'im."

The silence they had maintained since morning, climbing like insects up the inside of the Empire State, was suddenly broken. "Let's take 'im!" yelled another one. The slap-slap of their rag-and-hide-wrapped feet on the metal stairs rose to Smith. He swallowed and it tasted sour, and he upended the skin-bag.

The knucklebones spilled chatteringly on the landing. The pattern was random; he murmured. Hunkered down on his haunches, he called up the power, and there was the faintest hiss of a breeze in the stairwell. A breeze that was peculiarly bittersweet, the way Holland chocolates used to be. A chill breeze that broke sweat out on Smith's spine, in the hollows between his shoulder blades. Then the screams began. Below him, on the 100th floor.

Terrible screams. Small creatures with things growing inside them, pushing their vital organs out of alignment, then out through the skin. Watery screams. As solids turned liquid and boiled and ran leaving their containers empty husks. Short, sharp screams. As dull cutting edges appeared where none had been before and severed the flesh that had contained them when they were merely bones. Then the screams stopped. The silence that had climbed with the posse since morning, *that* silence deepened, returned.

Smith crawled away from the knucklebones, far into the corner of the landing, drew his bony knees up to his bearded chin, and whimpered. The breeze—casting about like an animal that was still hungry—reluctantly died away, fled back to the place from which it had come.

Smith, alone. Caster of runes. Reader from a strange grimoire only he could interpret. The only survivor of the catastrophe he had caused. The only survivor because anyone else out there was merely one step away from animal. Smith, whimpering.

Smith, alone. Alone.

Alone. The terrible word broke away out of him like projectile vomit: "Alone!" and fled to the walls, rebounded to sting him, turned echo-edged and rebounded again.

"But for me." Then a girl laughed girl-laughter, and down amidst the silence was the sound of quick, soft footsteps, and again girl-laughter, not spread about the floor below, but right in the stairwell.

And it was laughter footstepping up and nearer.

Terror and joy, terror and joy, shock and disbelief. Terror and joy and a terrible fear: oh, guard, oh, fight; oh, run, *look out!* Smith scrabbled to his knuck-

lebones, so hurried that he would not take standing-time, but hurried hunkering, hams and knuckles to his knucklebones. He swept them into a clack-chattering heap, and, "Mind now," he cautioned her (whoever she was), "I'll cast again, I will." He plucked up a bone, fumbled in the blackness for the magic bag, put in the bone, plucked up another, his shiny-dry dirty hands doing his seeing for his eyes were elbow-useless for seeing in such a black.

"But, oh! I love you," she said, so near now she could say it in a strumming whisper and be heard: oh! what a voice; oh! a clean, warm woman's voice, full of care and meaning; oh! she loved him.

Terror and joy. He plucked up the last of the bones, his eyes O's in the black-on-black, driving at the doorway to the stairs, where now a hand-torch flashlightninged an agony into him and he cried out. The flash was gone a-borning, too brief, almost, to have name at all, gone before its pointed tip had slashed its way from lens to optic nerve, gone long before its agony was done with him. And something alive, *life alive even after what he had done,* life alive was breathing in the dark.

A threat, a warning—yes, and a kind of begging: *be real! and in God's name don't make me do it again!*—he rattled his bag of bones.

The torch lit, arced, wheeling and swording a great blade of light, scraping and spinning across the floor to him. The flashlight struck the one knee he had down and he screamed, not for the knee but for the light sandblasting his unready open eyes. She made wide-smiling, welcome-words: "Here's light, my darling darling. Look at me."

He hand-heeled the scorching water out of his eyes and picked up the light. He pointed it at the doorway, and the man who stood there was seven feet, one and a half inches tall and wrapped in rags. He had a bloody beard down to his clavicles and a split stomach, and when the light hit him he bowed down and down and crashed dead on his face. He was a man whose liver was homogenized and had sweated out through the pores of his back—all of it, and a liver is a very very large thing, he knew that now.

"Oh, please," she begged him, "find me beautiful. . . ." and since he had not thought to move the light and the big dead bloody-bearded man stood no longer in the way, he saw a naked woman standing well back from the doorway, at the head of the stairs.

For a long time he crouched there with the light in one hand and his bag of bones in the other.

He rose to his feet and the bones tumbled a whisper down the path of light to the woman.

He was ever so careful, because perhaps if the light left her, she might be gone. He took a careful step, because perhaps she would escape. But no, she waited there sculpture-still and he went to her.

She looked straight and unblinking at the light as the light grew and grew near, until at last he could reach her. He transferred the bag to dangle from the fingers which held the light, studying her face as he had studied the darkness. He knew the instant before he touched her what his hand told him when it touched: that she was dead. She toppled away from him backwards and down, and disappeared in the darkness of the stairwell. The final sound of the fall was soft, vaguely moist, but ended.

Smith backed to the wall of the landing. The first finger of his right hand went idly to his lips, and he sucked on it. It had to have been a cruel joke of his own magic. These perambulating corpses. Something inherent in the incantations as they were filtered down through his consciousness, his conscience, his libido, his id. They were sympathetic magic, and that meant he, himself, Smith, was an integral part, not merely the voice-box. Not merely a way-station through which the charms worked. He was part *of* them, helped form them, was as necessary as the wood into which the nails were driven to form the shell of the house. And if this was so, then the filtering process was necessarily influenced by what he was, who he was, what he thought. So:

Side effects.

Like the destruction of the civilization he had known. Like the hideous torments that came to those he was compelled to destroy. Like the walking dead. Like the visible, tangible, terrifying creatures of his mind; that came and went with his magic.

He was alone, this Smith. But unfortunately, he was alone inside a skull densely populated with Furies.

In the rabbit warren he called a home, that barricaded cistern to which entrance was only possible through the ripped and sundered walls of the IRT 7th Avenue subway tunnel just north of 36th Street, Smith collapsed with weariness. He had failed to get the canned goods. His mouth had watered for days, for Cling peaches, for that exquisite sweetness. He had left the eyrie late the night before, heading uptown toward a tiny Puerto Rican *bodega* he had known was still intact. A grocery he had seen soon after the mistake, and around which he had placed a powerful incantation in the air, where it would serve as shield and obstruction.

But crossing Times Square—with the checkerboard pattern of

bottomless pits and glass spires—the posse had seen him. They had recognized his blue serge suit immediately, and one of them had unleashed a bolt from a crossbow. It had struck just above Smith's head, on the frame of the giant metal wastebasket that asked the now-vanished citizenry of Manhattan to KEEP OUR CITY CLEAN. Then a second bolt, that had grazed his shoulder. He had run, and they had followed, and what had happened, had happened, and now he was back. Peachless. He lay down on the chaise lounge, and fell asleep.

The incubus spoke to the nixie. *Have we opened him up enough yet?* No, not nearly enough. We counted too much on the first blast. *But what's left?* Enough is left that I still have difficulty emerging. We'll have to wait. They'll do it to him, and for us. There's all the time in eternity. Stop rushing. *I'm concerned. I have my principals as well as you, and they have equally as unpleasant a way of making their wishes and sorrows known as yours.* They'll have to wait, like mine. *They won't wait.* Well, they'll have to. This is a careful operation. *They've waited two million eternities already.* You turn poetry, but that isn't the figure. *A long time, at any rate.* Then a few more cycles won't twit them that much. *I'll tell them what you said.* You do that. *I can't guarantee anything.* When did you ever? *I do my best.* That's an explanation, not an excuse. *I'm leaving now.* You're fading; it's obvious you're leaving. *You'll stay with Smith?* No, I'll leave him, and go take a rest at the black pool spa . . . of course I'll stay with him! Get out of here. *Arrogance*! Imbecile!

Smith slept, and did not dream. But there were voices. When he awoke, he was more weary than when he had lain down. The grimoire still stood open, propped against the skull on the kitchen table he had set against the wall. The charts were still there, the candle was still half-down.

Something ferocious was gnawing at the back of his mind. He tried to focus on it, but it went chittering away into the darkness. He looked around the cistern. It was chill and empty. The fire had gone out. He swung his legs off the cot and stood up. Bones cracked. There was pain in his shoulder where a crossbow bolt had grazed him. He went to the rack and took out a corked decanter, pulled the cork with his teeth and let the dark gray smoke-fluid within dribble onto the raw, angry wound.

He was trying to remember. Something. What?

Oh . . . yes. Now he remem-

bered. The girl. The one who was spreading the word about him. *Blue serge suit,* she was telling them, crowds of them, rat-packs in the streets, *blue serge suit, a little weasel man, with a limp. He's the one who did it. He's the one who killed the world.*

If he'd been able to get out of the city, he might have been able to survive without having to kill anyone else. But they'd closed off the bridges and tunnels . . . they were now actively looking for him, scouring the city. And beyond the city . . . now . . . it wasn't safe.

Not even for him, for Smith who had done it.

So he had to find the girl. If he could stop her mouth, end her crusade to find him, he might be able to escape, go to the Bronx, or even Staten Island (no, not Staten Island: it wasn't there.

He knew he must find her quickly. He had had dreams, there in the cistern. He had gone to Nicephorus to glean their meanings, and even though he read Greek imperfectly, he found that his dream of burning coals meant a threat of some harm at the hands of his enemies, his dream of walking on broken shells meant he would escape from his enemies' snares, his dream of burning incense foretold danger, and his dream of holding keys meant there was an obstacle in the path of his plans. The girl.

He prepared to go out to find her. He took a piece of virgin parchment from the sealed container on which had been inscribed the perfect square in Latin:

S A T O R
A R E P O
T E N E T
O P E R A
R O T A S

and with the dried beak of a black chicken he wrote in purple ink he had made from grapes and shoe polish, the names of the three Kings, Gaspar, Melchior and Balthazar. He put the parchment in his left shoe, and as he left the cistern he made the first step with his left foot, pronouncing the names softly.

Thus he knew he would travel without encountering any difficulties. And he wore a black agate, veined with white. To protect him from all danger and to give him victory over his enemies.

Why had they somehow failed him at other times?

It was night. The city glowed with an eerie off-orange color, as though it had lain beneath great waters for ages, then the water had been drained away and the city left to rust.

He conjured up a bat and tied to its clawed foot a kind of kite-tail made from the carefully twined and knotted hair of men he had found lying dead in the

streets. Then he swung the bat around and around his head, speaking words that had no vowels in them, and loosed the bat into the rusty night. It flew up and circled and squealed like an infant being skewered, and when it came back down to light on his shoulder, it told him where she was.

He turned the bat free. It swooped twice to bless him, then went off into the sky.

It was a long walk uptown. He took Broadway, after a while avoiding the checkerwork of pits without even seeing them. The buildings had been turned to glass. Many of them had shattered from sounds in the street caverns.

There was a colony of things without hands living in rubble-strewn shops on Broadway and 72nd Street. He got through them using the black agate. It blinded them with darkness and they fell back crying for mercy.

Finally he came to the place the bat had told him to find if he wanted to locate the girl. It was, of course, where he had lived when he had made the mistake. He went inside the old building and found the room that had been his.

Here it had all begun, or had it begun when he went to work at the Black Arts Bookstore? Or when in college he had sunk himself so deeply in the arcana back in the library stacks that he had flunked out? Or perhaps when as a youth he had first thrilled to the ads in yellowed copies of *Weird Tales:* UNLOCK YOUR SECRET POWER. *Ancient mysteries of the Pyramids revealed,* or even earlier, when on Allhallows Eve he and some other kids had drawn a pentagram in yellow chalk? How old had he been then? Eight? Nine? There had been the candles and the geometric shape drawn on the floor, and he had begun to chant *Eu-hu, Elihu, Asmodeus, deus deus stygios*—nonsense syllables of course—how could they be anything else? But they had come to him and something in his monotonous soprano had shaped them—no, fleshed them. A glove looks like a hand; thrust a hand into it and it looks the same but is not; it is a far more potent thing. Words are words—nothings—but there seemed to be that in his young chanting that filled, that fleshed, each of them. And as for the words themselves, they came to him each dictated by the last, like the cadence of pacing feet: being here, there is only one place to go next; from *Ahriman* to *Satani* is somehow simply obvious, and then like hopscotch the young voice bounced on *Thanatos, Thanatos, Thanatos.* It was then that the bulge happened in the middle of the pentagram. The floor couldn't have swelled like that (it

showed no signs of it later), but it did all the same, and the thin pennants of many-colored smoke and the charnel smell did happen, and the crowding feeling of —of—of Something coming up, coming in. Then goggle-eyed kids deliciously ready to be terrified were terrified, ready to scream, screamed, ready to escape, fled in a galloping synergy of wild fears—all but young Smith, who stayed to watch the plumes of smoke subside, the Bulge recede . . . for his chant had stopped, and a panic-driven sneaker had cut the careful yellow frame of the pentagram, so that soon nothing was left but the echoes of that abandoned-abattoir smell and in Smith's heart a terrified yet fascinated dedication, for, "It worked!" he cried, he whispered: "It really worked . . ."

Basics are simple. The theory of solid-stage electronics is complicated, but the thing itself is not; the tiny block of semiconductive germanium called transistor, nuvistor, thermistor, tunnel diode is, as any fool can see, a simple thing indeed. So it was that Smith, working his way through matters incomprehensible, indescribable, and unspeakable, came all the way through the complexities of the earnest alchemists and the many dark rituals of animists and satanists and the strangely effective religious psychology which steeps the worship of the Nameless One sometimes called the Horned God, and many others, until he reached simplicity, until he reached basics.

Simple as a transistor, as difficult to understand.

And who, using a transistor, needs to understand it?

But a transistor (however precise) without a power supply (however tiny) is useless. The runes and the bones without the runesmith . . . nothing. With one, with the smith called Smith, fear more terrifying than any ever known by humankind, disaster unexpected, inexplicable, seeming random, operating on unknown logic and unleashing unknown forces.

In the Hall of the Seven Faceless Ones.

Stood the incubus and the nixie.

Before their masters.

Who told them.

Things they needed to know.

The time has come. After time within time that has eaten time till it be gorged on its own substance, the time has come. You have been chosen to act as our emissaries. You will go and you will find us an instrument and you will train it and teach it and hone it and mold it to our needs. And when the instrument is ready you will use it to open a portal, and we will pour through and re-

gain what was once and always ours, what was taken from us when we were exiled.

Here.

Where it is cold.

Where it is dark.

Where we receive no nourishment.

You will do this.

I am ready to serve. So am I. But what sort of weapon do you want us to get? *I think I know what they mean.* You always know what they mean; listen, masters, I don't want to be a nuisance, but I can't work with this incubus. He's a complainer and a befuddler and he's got delusions of authority. *Masters, don't listen to him. He's jealous of the faith and trust you've put in me. He rails under the lash of envy. My success with the coven against the Norns infuriates him.* Rails? What the Thoth are you gibbering about? Look, Masters, I serve gladly; there isn't much else for me to do. But I can't work under this lunatic. One of us has to be the charge-of-things on this. If it's him, then put me on some other duty. If it's me, then put him in his place.

Silence!

You will work together as needs be.

The incubus.

The nixie will be in charge of this matter.

And you will assist.

I serve gladly, Masters. Then why are you foaming? *Shut up!* Darling, you're lovely when you're angry.

We will hear.

No more.

You will begin now.

Find.

The weapon and teach it.

Open the portal.

We long to return.

How you do it is your concern but.

Do not fail us.

The nixie and the incubus had worked together as well as might be expected. The nixie said, We'll give him magic and let him use it. We can't go through, not yet at least, but we can send dreams and thoughts and desires: they'll pass through the veil. *And what good will that do?*

He'll tear a rift in the veil for us. *Oh, I can't believe the stupidity of your ideas.* Stupid or not, it's the way I'm doing it; carefully and smoothly, and you keep your trachimoniae out of it. *Just don't order me about. I'm the highest-ranking incubus—*

Just shut up, will you.

Shut up? How dare you speak to me like that? You'd better succeed quickly, nixie. My principals are anxious, and if you go wrong or slow down I'll make certain they have their way with you.

The nixie had found his weapon. Smith. He had given him first a series of dreams. Then a hunger to know the convolutions

of black magic. The bulge in the floor. The hunger of curiosity. Leading him, step by step through his life: the Black Arts Book Store, the proper volumes, the revealed secrets, the dusty little room, and at last . . . the power. But given not quite whole. Given in a twisted manner. The runes had been cast, and the mistake made—and Smith had destroyed the world, tearing the veil in the process. But not quite enough for the return of the Faceless Ones.

And the incubus grew impatient for his revenge.

The girl.

Smith was sorry. Standing in the room to which his bat had led him, he was sorry. He hadn't meant to do it. Smith had not, in the deepest sense, known it was loaded (nor had he been meant to know); and when it went off (in this room with half a candle and dust and books bound in human flesh, and the great grimoire) it was aimed at the whole world.

Peking, Paris, Rome, Moscow. Detroit, New York, New Orleans, Los Angeles: miles of cinders burying cold roast corpses. Checkerboard arrangements of bottomless pits and glass spires. Acres of boiling swamp. Whole cities that were now only curling, rising green mist. Cities and countries that had been, were totally gone. And in the few cities that remained . . . Water no longer flowed through their veins nor electricity through their nerves, and there they sat, scraping the sky, useless, meaningless, awaiting erosion. And at their dead feet, scurrying loners and human ratpacks, survivors hunting and sometimes eating one another, a species in its glorious infancy with the umbilical cord a thousand ways pin-hole-perforated before it had had a chance really to be born; and Smith knew this and had to see it all around him, had to see it and say, "My fault. My fault."

Guilty Smith the runesmith.

Back then to the room where the runes had begun, to trap a girl he sensed would come. He set a noise-trap at the outer door (it opened outward so he propped a 4 x 4 against it and an old tin washtub under it; open the door and *whamcrash*!) and next to it a rune-trap (which cannot be described here), and he settled down to wait.

The nixie to the incubus:

What have you been doing? *I've lured him back to the focus location.* You fool! He may suspect now. *He suspects nothing. I've implanted a delusion, a girl. When he sleeps we take him and rip the veil completely.* What girl!? What have you done? You can ruin it all, you egomaniac! *There is no girl. A succubus. I tried earlier, but it went wrong.*

This time he's weaker, he'll sleep, we'll take him.

What makes you think he'll succumb this time, any more than he did the last time? *Because he's a human and he's weak and stupid and lonely and filled with guilt and he has never known love. I will give him love. Love that will drain him, empty him. Then he's mine.*

Not yours . . . ours!

Not yours at all, nixie. The Masters will see to you.

He stood in a dark corner, waiting. And sleep suddenly seemed the most important thing in the world to him. He wanted to sleep.

Sleep! Should a man live threescore years, one of them must go to this inert stupidity, a biochemical habit deriving from the accident of diurnal rotation. The caveman must huddle away behind rocks and flame during the hours of darkness because of the nocturnal predators who can see better in the dark than he can. They in turn must hide from him. Hence the habit, long outmoded but still inescapable. A third of a life spent sprawled out paralyzed, mostly unconscious, and, oh! vulnerable. Twenty years wasted out of each life, when life itself is so brief a sparkle in a surrounding immensity of nothingness. Smith had hated and despised sleep, the cruel commanding necessity for sleep, the intrusion, the interruption, the sheer waste of sleep; but never had he hated it so much as now, when everyone in the world was his enemy and all alone he must stand them off. Who would stand sentry over Smith? Only Smith, lying mostly unconscious with his own lids blinding him and his ears turned off and his soft belly upward to whatever soft-footed enemy might penetrate his simple defenses.

But he could not help himself; he *wanted* to sleep.

He lay down fully dressed and pulled a blanket over him. He murmured his goodnight words, which for a long time had been: "I didn't mean it. I didn't mean it. I'm sorry. I'm sorry . . ." and as he tumbled off the edge of waking, he would catch one awful glimpse of tomorrow—more of the same, but worse.

But not tonight. Perhaps it was his exhaustion, the long thirty-six-hour flight up the Empire State Building, trying, out of guilt and compassion, not to use his terrible weapon (how many times falling sickly asleep had he determined to walk out unarmed and get from the new barbarians that which his guilt deserved?), or perhaps he had reached a new peak of terror and shame, and feared especially the vulnerability of sleep. Whatever it was, as he approached the dark tumble into oblivion, something made him claw at the edge,

hold fast, neither asleep nor awake, just at that point through which he usually hurtled, unable to stay awake and on guard any more.

And he heard voices.

Now I send her to him. Now when he's weakest. Wait! Are you sure? This man . . . he's . . . different. There's been a change in him. *Since we last manipulated him? Don't be ridiculous.* No, wait! There is . . . something. Sleep. Yes, that's it. It has to do with sleep. *I'm not waiting; my Masters want through now, in this tick of time, now! I want success more than you, that is why the triumph and the rewards will be mine. The twelve generations it took to breed this Smith as a gateway and the lifetime it took to train him. It's all come down to me, to me to fail or succeed, and I'll succeed! I'm sending the succubus, now!*

No! You fool! Your ego! Sleep is his strength. You have it all wrong. Nothing can harm him when he sleeps!

Success!

Smith clung for one more amazed moment to this place, this delicately limned turnover point between waking and sleep. This line was a crack in—in something incomprehensible, but it was a crack through which his mind could peep as between boards in a fence.

Something began to beat in him, daring to move: hope. He quelled it quickly lest it wake him altogether and those—those *others*—know of it. Slipping, slipping, losing his clutch on this half-wakefulness, about to drop into total sleep, he snatched at phrases and concepts, forcing himself to keep and remember them: twelve generations it took to breed this Smith as a gateway . . . lifetime it took to train.

And: Nothing can harm him while he's asleep.

Sleep the robber, sleep the intruder, sleep the enemy—all his life he had tried to avoid it, had succumbed as little as possible, had fought to live without it. *Who had taught him that?* And what did the doctors and poets say about sleep; surcease, strengthener, healer, knitter-up of the raveled sleeve of care. And he had sneered at them. He had been *taught* to sneer.

He had been taught. More: he had been bred for this—twelve generations, was it? And why? To be given the power to decimate humanity so that something unspeakable, something long-exiled could return to possess this world? Would it be Earth alone, or all the planets, the galaxies, the universe? Could it be time itself?

The one thing he must do is sleep. "Nothing can harm him when he sleeps."

Then she came to him. The

(*to page 128*)

VOICES ANSWERING BACK: THE VAMPIRES

Rising in lamplight dying at dawn
grim burials in sheds and cellars
the rats scuttling through holes
and the days following in their tracks
exiled here we named the hours
since you first forgot to be afraid
once departed we became
only ourselves
with the salt on our tongues
and the cold for company
so deft in escape so practiced in dying
you might have learned from us
but each time the easiest trick worked
the brandished cross the empty mirror
you could not see us our steps upon the stairs
and while you stumbled after bats in the garden
we climbed quietly
from the upstairs window down the drainpipe
and through all the parties
you never heard what we were saying
it was something about desire
what we had in common even then
in your silence you feared us
always winning at the end but do you think
nothing lingered past dawn
shadowed among the gathered elms
do not be mistaken
we heard you walking through our dreams
we felt death moving between your hands
now we are waking early
practicing with sunlight
now we pass unharmed beneath your terrible star
eyes covered hands in our pockets
for the rules have always said
if you stop believing in us
we inherit everything

—LAWRENCE RAAB

Here's a story that offers a fresh approach to the old fantasy story line of the-man-who-could-see-into-the-future. It concerns one Winthrop Brandon, whose forecasts were both short-range and very profitable, until a series of experiments suddenly and chillingly extend his power.

THE FOURTH TENSE OF TIME

by Albert Teichner

THIS WAS JACK FOSTER'S FIRST visit to a racetrack and he liked it. His surgical practice kept him busy seven days a week, but now the floral luxuriance of the inner circle and the well-groomed women everywhere reminded Jack that ease, too, had its merits. Besides which, coming here offered some tiny hope of forwarding his research.

"A wealthy man," Quincy Bright said, leading the way into the VIP elevator. It purred upward. "Unbelievably wealthy, I sometimes suspect, but a mystery man. Seldom see him, not since about Christmas '69. Funny, though, his phoning and insisting I bring you along."

"You've got almost forty years' practice over me."

The white-haired man laughed, holding up an unsteady hand. "Merely a diagnostician now. No, Jack, it was to get you here."

The elevator stopped and they moved onto a carpeted terrace. They entered a private box overlooking the starting line.

Winthrop Brandon was the only person there. He wore a white Panama hat of the sort popular forty years back, and his round face looked utterly relaxed except for two extraordinary deep clefts between his eyebrows and extending up into his forehead. "Ah, Foster!" he said, rising. Although both doctors were tall, he towered above them. "Sometimes television doesn't lie."

"Oh, you saw that interview show, sir?"

"Yes, doctor."

"Only time I've ever been on."

"Time enough to interest me." The millionaire gestured for them

to sit down and, after having drinks served, went on. "A foundation to study headaches and allied afflictions, I like that, I like that very much. The way you talked about it, I knew you had your heart and soul there and wondered if I could help. I *knew* you were sound." He leaned forward, a kindly Santa Claus smile on his face but with pale blue eyes like two flattened icicle tips.

"I should explain more about myself," Jack began with his usual diffidence, but Bright broke in, "Jack's everything you say, total devotion of heart and soul."

Brandon's smile vanished. "No high-pressuring, Quincy. I said I *know* your young friend's all right. I can tell about people always—literally." The smile came back as he turned toward Jack. "I sound like a cranky old fool but I'll try explaining. When I consider somebody I'm dealing with, I don't ask myself what he'll do a month or a year from now. I just wonder how he'll look at matters and act a few hours after we've separated. If I can see that far ahead I know enough to judge him." The forehead clefts deepened still more. "I knew you'd be as sincerely dedicated two hours later as you were on screen."

Probably *is* some kind of crank, Foster groaned, but a good, useful kind. "I haven't personal financial problems—any neurosurgeon can get by—but it's a matter of time, of dropping a heavy operating schedule to concentrate on the research."

Brandon nodded, then said, "Have fifty dollars on you?"

That surprised them; it sounded as if the rich man were about to hit them for a loan. "Why sure," mumbled Jack.

"Then put it on the daily double." He handed him a slip of paper. "Zanzibar, number four in the first, Boomtown, seven in the second. Let the winnings be the first contribution to the Foster-Brandon Headache Foundation." He yawned, then shooed Foster out of the box. "Don't start flustering around like an old maid—if you lose I'll make the money up. But you won't lose."

Jack descended to the betting windows, feeling like an errand boy. There was something almost obscene about the confidence with which Brandon gave orders, as if he were certain he could manipulate everyone and everything, even the future.

A weasel-faced man behind Foster snickered when he heard the selections. "Zanzibar? And Boomtown can't even find a finish line! You poor chump!"

And that was how he did see himself, crawling back up to the great man's box. But Brandon was now politeness itself. Over their host's shoulder Quincy gestured for Jack to hide his annoyance.

Somehow he managed to do so.

Then the first race was off in a chaos of shouts and clattering hooves topped by the tight stacatto of the track announcer. In the midst of many other names Zanzibar kept recurring; and then, before Jack could grasp what had happened, the race was ended, and Zanzibar had won by two lengths, paying 26 to 1.

"Excellent odds for the double." Brandon stretched. "If I'm right about Boomtown, you stand to win about nine thousand."

The doctors gaped while Brandon closed his eyes and dozed. "Of course, the odds are extremely high against two in a row," warned Quincy. "But sometimes I think Winthrop doesn't know how to be wrong."

"And sometimes I wish I did know," Brandon came in, eyes still shut but a grim expression on his face. "Being wrong might be a beautiful experience."

After that they said nothing to disturb Brandon's repose. When the second race began he awoke but didn't bother to glance at the track. "Your answers in that interview made sense, young man, good sense," he said, staring intently at Foster.

But he was too seized by gambling fever to answer with anything but an abstracted nod. "Boomtown, Boomtown," was all he could hear, "Boomtown third! Boomtown fourth!"

". . . something substantial for humanity," Brandon was saying, "an almost universal affliction. And don't think I'm merely humanitarian. You might even be able to help *me* someday!"

Why was the old man going on like that? Jack wondered, while Quincy shouted himself hoarse. "Come on, Boomtown! Come on!"

"Yes," Jack mumbled, "help to everyone, sir."

And suddenly the lunacy was over and even the announcer was bellowing louder than usual because of the unanticipated outcome. "Boomtown by a length, yes indeed, Boomtown by a length!"

The daily-double winning came to $9,150 and Foster pocketed the money with an exaltation not felt since his first, brilliantly successful brain operation. Coming back from the payoff window, though, a tiny doubt crept in. How could Brandon be so sure about the races? Was a profoundly corrupt man tossing a little conscience-bone to humanity? But no, it made no sense. Chance, pure chance was the explanation.

On his return, Brandon nudged him and said, "You must think I have sinister connections with race promoters, eh?"

Startled, Foster mumbled, "Oh, no, sir! It's all going right into the fund."

"I wouldn't advise that yet," frowned Brandon.

Bright leaned forward. "Winthrop, you don't think Jack would use this money for personal—"

"Of course not! I told you I *know* when a man's dedicated." The frown deepened as Brandon picked up the racing form. "Glanced at them yesterday but couldn't decide *then*." He rubbed his forehead as if easing intense pain, then smiled. "All right, here's the win bet for each of seven races, a thousand each time. The third starts soon, so better hurry—even though I'm not completely confident of my choice in this one."

Too dazed to object, Jack rushed to the betting windows and managed to place his money just in time. The third had started before he entered the elevator, and a loudspeaker blared the result before he reached the box. His selection had lost.

"Can't win them all," Brandon chuckled, while his guest hastily figured what might be left after all the races had been run.

But there was no need to subtract; all Brandon's other choices won, and at the end of the afternoon Jack was stunned to find himself with over $63,000 in his pocket.

"Only the beginning," Brandon assured them. "You'll be getting more assistance. But go to another track next time." He grunted. "Ah, good—feeling better now, much better."

Jack reached for his wrist. "Anything bothering you that I could help—"

"Not now—the usual nuisance and the usual end to it. Now where was I before you interrupted? Ah! Keep your luck secret as long as possible. Otherwise they'll follow your leads and wreck the odds. For my own part, I never bother with the horses, haven't for the last thirty years. Good day, gentlemen." And he turned his back on them as if they no longer existed.

Driving back to Manhattan, the two doctors tried to absorb what had happened. "Always was an old fox," Bright explained. "Never bets on the races! Why he must study them like financial statements—"

Jack shook his head, eyes all the while straight ahead on traffic. "Maybe. But I don't see why he'd bother to lie. Even if you're right, nothing's explained. It's downright eerie. How could he know eight winners when most were long shots?"

Three days later Foster received a call from Brandon. "Get out to Jersey this afternoon," he commanded, "and bet the following—"

"I'm terribly sorry, sir, but I have two important operations rather early this evening. It's eleven thirty—"

"Damn it, don't I already know that? Naturally, I couldn't figure

these races out before, and I can't go through this painful effort every day!"

The angry blasts that followed set Jack's usually steel-steady hands aquiver. "I'll cancel everything, Mr. Brandon."

"And never go through a bookie—all bets at tracks." He rattled off the selections at an inhuman rate.

Fortunately, there were only some conferences to cancel for that afternoon, but driving out to the track, he brooded over Brandon's mysterious behavior. Why, after such kindness the other day, was he so rude now? Why call at the last minute? And couldn't he have handicapped today's races earlier?

At the end of the day, though, these questions seemed minor beside the most basic one: how could Brandon have picked *all* winners this time? $20,328.25 worth to be exact. No man could rig seventeen races at two tracks.

That night Foster performed two operations, both on complex brain tumors, with computer-like precision. Despite the way his mind kept wandering to the puzzle of Winthrop Brandon, he brought them off without the promise of further complications.

One thing he had learned for certain today—appointments, consultations, operations, all were to be avoided in afternoon hours. The following days confirmed this. Brandon contacted him several more times, always at the last moment. Twice the old man accompanied him, and each of those times Jack saw the same ritual enacted: earnest, downright painful study of the rest of the day's card only after the first race, and then the gradual slackening off of that pain. At the end of the last visit to the track Brandon abruptly snapped, "Well, doctor, what have you won altogether these past three weeks?"

By now he was accustomed to Brandon's mood reversals and calmly sat down to make some calculations. After adding the latest sums to an adding-machine tape he had been carrying, he said, "This is hard to believe—"

"Come on, come on!"

"$198,274.31!"

"What was it today?" Brandon's pen was poised over a business envelope, and he jotted down the figure Jack gave him. "Down to the penny, you're an honest man, Foster. You'll get the best legal counsel on tax angles, so don't worry. Now I want you to come home with me."

In the deep-cushioned Rolls, Brandon turned on soft stereo music and there was little conversation. Once, though, he blinked his eyes with great, flinching force and said, "Headaches are humanity's greatest curse and a cure would be humanity's greatest blessing."

"There's no blanket cure, we can't raise too many hopes."

"As always, honest." Brandon shrugged.

The road on Brandon's estate wound a half mile through park land before it reached the main house, which looked like a small chateau on the Loire. "You must not get the idea that I am a rich man, doctor." He tested the thick glass between them and the chauffeur. "No, I'm an *extremely* rich man. I have always had the Midas touch. And, like Midas, I would have gladly lost some of it for a few other things I lacked." He smiled sourly. "I don't mean romantic claptrap about people only having loved me for my money or how I would have enjoyed the simple life. I've had four beautiful, affectionate wives who conveniently took off when I tired of them."

He conducted Foster around the mansion, showing him the swimming pool with its retractable roof and a collection of modern masters from Manet to Cezanne which, while small, was of the highest quality. "Some things I liked. I'm not one of the great collectors, never cared for the publicity of richest-men lists." He closed the large oak doors of the library, and they sat down by the fireplace in wing chairs, facing each other. "Not only has money become a bore for me, even the chase for it has palled."

The great financier seemed to want frankness this evening. "Sir, why do you always study the card immediately before the races begin, then work up the later races while the earlier ones are on?"

"Ah!" He began to smile.

"I imagine you'd sometimes find it more convenient to handicap the night before."

It was a broad smile now. "You do notice the important detail! All right. Past experience tells me I would have just an average win-loss spread."

"You mean a good-luck habit, no self-confidence if the routine's broken."

"No!" he snapped. "I *literally* cannot achieve high accuracy if I predict more than five or six hours ahead. This is an objective fact, derived from my experience, not a neurotic quirk."

"But—"

"No buts! Young man, I'm paying you to listen and I always get what I pay for. When I was eighteen I'd been working four years as a messenger boy on Wall Street." He leaned back between the wings of his chair and stared into the distant years. "An orphan in a totally indifferent world. But all around me—it was 1905—I saw great fortunes being made, and I wanted to radiate the same self-confidence as the new millionaires. I lived in a tiny, smelly, skylight room, saving two dollars a week by eating slops. But I kept

my eyes open. I became familiar with the mechanics of stock investment, and mornings before work I'd study financial news the way kids today play Monopoly, wondering what I'd do if I had the money to invest. Again and again I correctly anticipated market behavior for that day. Then one morning it dawned on me: I did have the money now, 450 sweatily scrimped dollars!

"I studied the Exchanges that day and found some interesting items. Then I concentrated so hard it actually hurt and got the answer: Nicaraguan Mining, going at a mere 2¼. Every dollar went into it and that afternoon it rose to 4¼—those were wild days!—and I sold before the market closed. Two more times in the following week I went through the same painful study, and each time my wealth doubled. When I reached $3,000 I resigned my job and became a full-time speculator."

His eyes closed and he seemed to doze but, just as Foster was going to ask what was wrong, they flew open again, still focused on the same point in space. "Within a year I was close to being a millionaire. I never made a mistake. Always the same routine, doctor, intent, rather painful concentration in the morning on a group of facts, then money on the line for something I expected to rise suddenly and sharply, then the quick sell-off. You must win big that way to keep ahead of brokers' commissions. I did.

"Then I really was a millionaire! I decided to become a normal one, speculating on a longer-term basis. There my returns were very ordinary. Focusing again on a short-term situation, though, I was wildly successful 99 times out of a 100. I worked through many brokers and through a few trusted, well-paid front men, so I didn't have to worry about the whole Street following my infallible leads. They just knew of my long-range, lower-yield investments.

"In the twenties I had too much money for hectic in-and-outs. Some of it I turned at racetracks, in the great boxing pools of the time, and in other sports because there, too, I knew how to guess right for short-term killings. But you know, Jack, whenever I figured a race the day before, I did no better than your average man—craziest thing, I know, but there it was. Another thing—games of pure chance, like roulette or dice, never went especially well. I needed some clues to focus into a correct conculsion through bitter concentration."

He cleared his throat and, much calmer now, went on. "All my money couldn't be dumped into gambling and speculations—it would cut down the profiteering odds. So I had to move into more

prosaic fields. I'd meet the men in a company seeking capital, size them up, then act according to how I predicted their behavior."

"Oh, no!" Jack had to show he wasn't swallowing *everything*. "You did say your long-range prognoses weren't so good."

"No inconsistency." He grinned almost amicably. "If I size up a man's outlook for the few hours after he leaves me, I've a damned good idea how he'll tend over a longer stretch." Abruptly, he was disdainful. "For the first time, even with those thousands in your pocket, you can't hide your scepticism. All right, young man, consider this—electronic eavesdropping isn't totally new. Three times in the early thirties I had rooms bugged to get corporation directors' comments after I'd gone. In each case, the recordings only confirmed my prior expectations in *every* respect! Insight, that's what makes the difference."

Foster diplomatically concealed his doubts. "And you say this insight concentration has always involved discomfort?"

"Exactly." His eyes dropped to his trembling hands. "Worse, as the years have gone on. I don't attempt big coups any more, just takes too much out of me." For the first time he stared directly into Jack's eyes. "I'll finance a research setup for you and Quincy. And if you help me eventually, that support will grow."

Jack was no longer wildly enthusiastic. The man had to be partly psychotic to believe he had some assured monopoly on the near future. Some day, disappointed, he could turn on his financial godchild.

Jack took a deep breath. "You'll require many physical tests, Mr. Brandon, and none of the equipment is here, but there's something I'd like you to try. Do you sleep long hours?"

"Never did. Get up and work a few times at night and take cat naps during the day."

"Perfect—for our purposes. Let's try this at eight each morning. Handicap the *last* races for that afternoon. Or, if you're up at 2 A.M., study some stock and decide how it'll stand at *noon*."

"Ten hours? Won't work!"

"Have you tried recently?"

"No. Won't get the headache—but won't get the accurate forecast either." He considered Foster's earnestness, then laughed. "Okay, what the hell! I'm up so much of the night I'll string along a few times!"

Afterwards, Jack headed straight for Bright's home. The doctor listened for a half hour without once interrupting, then exclaimed, "I always knew Winthrop was rich and peculiar, but I never realized that rich and that peculiar! Obviously his six-hour limit's sheer neurosis but why suggest that ten-hour-advance ex-

periment nonsense, Jack? *Physical* tests are what he needs."

"Of course, but we must consider every possibility."

Bright gave that sceptical squint that Foster remembered from med school days when he was known—and admired—as the most cynical professor around. "Jack, you're not toying with the notion of something nonphysical here?"

He wriggled uncomfortably. "Naturally not, I'm a surgeon, strictly interested in solid physical problems which I can slice up, but his runs of luck are completely against all statistical probabilities! Did he ever talk about headaches to you?"

"No, just in passing," Bright frowned. "Anyway, I know he's very Jekyll-Hydeish, but more Hyde, with a bad temper you don't want to stir up. His money can do a lot of good, so when we start giving him *real* tests next week, be extra diplomatic. Is that a promise?"

"All right," he grinned. Not that there was anything too amusing about a situation as enigmatic as the Brandon one now was.

Sunday afternoon Brandon called, greatly excited. "You were right," he cried, "but I'm not particularly pleased, Foster. Twice I handicapped early in the morning and hit them on the nose each time. And on the market I made two big hits Thursday and Friday after 2 A.M. study. But my head ached so it was hardly worth it."

"I'm sorry, sir."

"Lot of good that does! How the devil did you know I could do it?"

"I didn't. We just have to experiment. Now stop telling yourself headaches are inevitable, and there's a chance they'll surprise you too."

"Not my imagination!" Brandon shouted. "They're real—so don't hand me that neurosis stuff. I ought to know the inside of my head better than you do—certainly until you take some real measurements. I want them to start day after tomorrow, right after I get the foundation legally established."

"Can you be at Bright's laboratory that noon? He says you've been there once or twice."

"I know my way, if that's what you mean. I want a minimum number of medical aides around. I'll arrive in an old Dodge and my chauffeur won't be in uniform. Privacy!"

"Yes, sir, Doctor Bright has explained your needs."

"Nobody can explain them, not even me maybe! There's no explanation!"

No explanation. Foster felt a tremor of anxiety but said, "One more little experiment: it's about three now, isn't it?"

"Three sixteen. You should always be exact about time."

"Yes. Could you get tomorrow's racing form right away?"

There was a long pause. "I get anything I want when I want it—except relief from this worsening thing I've had in my head all my life!"

"You'll have that relief, sir. As a start, if you're up to it, study the form for tomorrow's last three races at Aqueduct *now*."

"Twenty-four hours never will work, don't you understand? Maybe it's like chess, you can figure all possibilities for the next two or three moves, but then there are too many of them."

"A very good comparison, Mr. Brandon. But just try, try tonight and try tomorrow night, then we can discuss the results Tuesday."

"You're a pest, Foster!" He slammed down the receiver.

Jack worried all night about that last outburst. There was something terribly undependable about the man on whom they were becoming dependent. But the next morning at the hospital Quincy shrugged it off. "Sure, he's hard to handle, Jack, and let's not kid ourselves, there's a mean streak along with the philanthropy, but he will donate plenty more."

"Oh, I'm not selling our man short," Jack assured him, "even without donations. Brandon may be more valuable as the object of our research than as its sponsor."

"Meaning?"

"Meaning something very weird indeed must be giving him his headaches."

Bright slammed his desk. "No occult gobbledygook, Jack. You'll find it's an allergy or a sclerotic condition or a cyst or—"

But Jack was adamant. "Forget medicine and concentrate on the math and you'll realize it's one chance in trillions that Brandon could be so consistently accurate about bits of the future."

"In other words, there's no natural explanation!"

"The cause is natural," he conceded. "But can we find it—and can we recognize what we find?"

Tuesday Brandon appeared precisely at noon. He looked so tired that they offered to put off the tests. "A long exhausting procedure," Foster explained.

"Let's get it finished! All due to your meddling."

"To me?" Foster exchanged an anxious glance with Bright.

"Wait a second!" Brandon pulled out a legal document and gave it to them. "Study it later. The Headache Research Foundation is starting with a $300,000 grant, and both of you must keep outside activities to an absolute minimum. Now then, I tried your little thought-experiment once and it didn't work! No headache and no insight." He cleared his throat. "But five A.M. today I picked up the same corporate report I fruitlessly examined Sunday night, and suddenly, just as a vile

attack came on—it absolutely felt as if my head were exploding!—suddenly I knew there'd be a sharp break about noon. It's just been announced."

"Where did you feel this headache?" asked Foster.

"Everywhere, temples, nose, skull, forehead, everywhere!"

"And then it went away?"

"Not exactly." He looked frightened. "The sharpness went but now there's an almost endless throb. Oh, you'll never find what's wrong."

"Now *that* isn't in your prognostication range."

"Won't find it this afternoon, Foster."

The battery of tests began. There were X-rays and cardiograph readings and very elaborate EEGs and dozens of blood-function analyses. Then the old tycoon was subjected to intelligence and co-ordination tests. By four that afternoon the accumulated data comprised a small encyclopedia on his physio-psychological functioning but, at first glance, it showed very little that was unusual. For a man of eighty-five Brandon was in excellent shape, with even severe allergic symptoms lacking for theorizing. The one extraordinary thing was his 175 IQ.

"Didn't need any nonsense to know that," Brandon spluttered. "I've always been damned smart!"

When he slipped out a side door to his battered Dodge, Bright took up that issue again. "That ends all your speculation. A man that smart foresees the future naturally."

"It could be the opposite. In close to 100 races he missed only two winners—and those were the only cases where he, himself, expressed uncertainty! I'll grant that intelligence is the core of foresight as we know it but, for the sake of argument, Quincy, very temporarily grant me one thing—that it's possible for a few people to foresee aspects of the future some other way. Such people would foresee some answers in an intelligence test without correct reasoning. But the correct answers would boost their IQ ratings anyway!"

Bright hesitated a moment, then briskly shook his head. "Speculative nonsense. Let's start diagnosing *facts*."

They worked through the data until ten without even a break to eat. When they were finished Bright was in despair. "The man's a paragon of *healthy* senility! Nothing, nothing from the electroenceph readouts to his icteric index points to headaches. How can we tell him it's purely neurotic without driving him away?"

When Brandon came through ing for his jacket. He fell into a gloomy silence as they went to a neighborhood diner, the one eating place still open there. Bright was equally depressed.

Once they were settled in their booth, Jack cheered a little. "Friday we're going to give him the tests again."

"You're the one with crazy headaches, Jack!" He took a long gulp of water. "It's my lab and I'm not going to have it used to antagonize Brandon!"

Jack frowned. "I'll speak to him."

"You bet you will!"

"—And he'll be all the more pleased with us for our persistent solicitude. The real trick will be giving him the tests again a few hours later."

"NO!" The dour waitress who had taken their order came back and Quincy's voice lowered. "It's all right, miss," he told her, "just explaining the facts of life to my young friend." She shrugged.

"Quincy, Brandon says the headaches are much, much worse when he's analyzing and forecasting. Wouldn't we get more significant measurements *while* he works a problem?"

"But that's not a decent reason for dragging him through all that a *third* time!"

"Well, consider a minute. He's busy with a problem at noon and we take our readings. What can we compare them with? If we take readings again at three or four, we can look for significant differences between problem-solving periods and those of lesser concentration."

"So why not compare those noon concentration readings with today's when there was no problem for him?"

"We'll be doing that, too! But the third set will give us a broader base for seeing how his normal condition differs from his intense one."

"Maybe." He waited until the waitress set down their steak platters and departed. "I'll go along with the noon measuring but the X-rays and most of the IQ tests must be dropped."

"Agreed."

"And I'm not having any patient of mine riddled by needles. You make a list of ten items for that third period, no more."

"Blood pressure, skin tension, EEGs—"

Bright looked up from his steak. "EEGs? Don't see why. You picked up 14 component waves today and you'll have 14 Friday noon. These new machines give very broad spectra—"

"Three sets will be better."

Quincy was thoughtful as he chewed. "As you wish, Jack—but the other tests must be radically reduced."

Jack sighed. "You've got a deal."

When Brandon came through the side door on Friday, he was haggard. "Just keeps getting worse," he groaned. "Maybe I experimented too much. I tried that

twelve-hour business again. At 11 P.M. I asked myself how GM would be doing at 11 A.M. The worst kind of migraine came on, but I got a perfect picture of the market price. At 11 it went down 3¼ just as I anticipated. I can now forecast *12* hours ahead—and have worse headaches!"

"Unfortunately," Jack nodded, "it's the only way to make a breakthrough."

"No, I'm no longer mashing my brain to a quaking pulp at two in the morning so you can see how well I predict—"

"I'm sure Dr. Foster meant no such thing," said Bright, alarmed.

Jack unfolded a copy of the *Morning Telegraph*. "Today's," he said. "Our test series will be shorter than Tuesday's—shouldn't take more than an hour now. But we've decided our results will be more illuminating if you're working on a predictive problem and, yes, suffering a headache peak *while* the test's given."

Brandon was slightly mollified. "Does make sense even if it is a damnable imposition."

"Good. I'd like you to skim data for this midafternoon race at Aqueduct while we're taking blood-pressure readings and so on. No intensive concentration, though, until we put the encephalograph on."

"Then get started!" Brandon muttered, picking up the turf newspaper.

When the EEG finally was turned on, the old man became more intent over the data and his forehead lines deepened. "Worse than ever," he muttered. "Earthquake will win!"

Afterwards he took a nap and Bright led Foster into another room where he bawled him out. "You're handling Brandon all wrong, Jack. I don't like it."

"What am I doing wrong?"

"Everything. He's not going to take much more from us."

"I still don't under—"

"All right, for example, all this EEG emphasis, you know that's a dead end."

"Perhaps," Foster snapped back. "But we have to try, don't we?"

When the second series of the day began about three, they had to hide their differences from Brandon. Afterwards, though, he said, "It isn't going to be of much use for me if the doctors themselves disagree, eh?"

This further exacerbated bad feeling after Brandon left. Following each comparison of readings, Bright muttered, "Doesn't prove a thing, not a thing!"

"Just have to plod on," Jack sighed.

Finally Bright rose and stomped to the door. "You'd better get your feet back on the ground, Foster. I've been diagnosing human ailments about forty years longer than you have, and

I'm now insisting on a little less encephalography and a little more practical treatment."

"A dozen placebo aspirins won't cure any patient!" Foster shouted, too irritated to worry about the consequences. Bright did not wait to hear any more.

Foster said nothing to him when he returned from supper, but he no longer looked angry. He was staring, stunned, at a window.

"What's the matter, Jack, not feeling well?"

Jack slowly turned toward him. "It's unbelievable, Quincy, but it's there!" He thumped two long scrolls of EEG readouts.

Bright flattened them out as best he could on the desk and inspected them. "Nothing special. From the little I know, Jack, these alphas and betas are what you'd expect."

Foster pulled himself up and came around the desk, saying, "We don't have to be specialists to know this is wild. Look, look at the eleventh band down on each reading."

Bright stared, uncomprehending.

"I've put arrows on each sheet where the insanity begins."

Bright arranged the sheets in parallel, then shifted them until the arrows were aligned. "Oh, no!" he shouted.

"But there it is. That sequence registered at 12:46 when Brandon was focusing intensively on the Aqueduct race. This one came at 3:37 when the race was in progress. They're absolutely the same, the squiggles are absolutely congruent for over a minute's readings! There's less chance of two long squiggles being *exactly* the same than of two people having the same fingerprints!

"Unless the machine's broken down, this means an electrically measurable event in a part of his brain took place twice in precisely the same way!" He shook his head. "The odds are totally against a machine error being exactly the same each time." He hesitated. "Anyway, I think so." Then the hesitation was gone. "We must keep testing Brandon.

"And look especially hard at the eleventh component which reads a motor-speech area. Incidentally, Quincy, I called a newspaper friend, and he told me the winner of that race was Earthquake."

But now Brandon turned out to be even more of a problem than expected. "I'm not coming there any more!" he roared over the phone. "Never."

"It's the electrical readings," Quincy tried to explain. "With enough of them we may pinpoint the pressure point of those headaches."

A long pause. "If you bring that equipment out here, okay, I'll

go through the migraines you damned fools seem to want me to have."

"It's a large machine," Quincy protested.

"Take it or leave it!"

"Certainly, Winthrop, we'll be glad to get it out there."

"Glad or not!" exlaimed Brandon.

Without disclosing anything that had happened, they brought in some engineers to examine the equipment. Everything, it turned out, was in perfect working order.

The following Monday the encephalograph was set up in the indoor tennis court of Brandon's estate, and servants were given strict instructions to stay away. For three days the old man, complaining about the growing persistence of the headaches' peak periods, submitted himself to brainwave testing. In every case the eleventh component of an intense predictive period was precisely repeated at the time of the predicted event.

Wednesday evening Brandon became enraged over the proceedings. "This can't continue much longer," he warned. "Explain what you're doing soon. I'll arrive at the correct conclusion, the one you two evidently can't reach."

They went back to Bright's place to discuss the crisis. "He makes it sound as if we're picnicking," Jack complained.

"But we will have to tell him, Jack. The truth's obvious now—as impossible as it is: a part of his brain can, under proper circumstances, live in the future while the rest of him is in the present!"

Foster was pleased. "That's a load off my chest. I was too afraid you'd balk at that to bring it up."

"I do balk but the logic's too strong!"

"I suspect it's more widespread than just one brain area where the future becomes worded—some of the metabolic readings tend a little toward matches between predictive and predicted moments. But right now they're too vague."

"What's certain is that one area of his brain really gets into the future." Bright wearily rubbed his temples. "Maybe all human brains function to a lesser extent in the future, the extent to which they correctly anticipate things."

"Well, we'll have to tell him something. Tentatively, here's what I think the mechanism is. From subatomic particle to the cosmic event everything vibrates to a near-infinity of wave systems, maybe just *is* a series of interweaving wave systems. We only know a tiny part of the potential range. For example, one vibration might have a sine wave longer than the Milky Way—consider how long it would take for one cycle to pass, none of our instruments could ever grasp it! And then on such a basic wave

would be inscribed infinite subwave variations."

"Now I have the headache." Bright weakly smiled. "Where does it tie in with Brandon?"

"Assume a peculiar physiological variation in that brain zone is predisposed to premature reception of vibrations normally part of the near future, like an echo received *before* its sound base. When he concentrates on some substantial facts the predisposition involves the consequences of those facts."

"It may be hell, explaining to Brandon. He's so vain about his intelligence and perspicacity."

"But he could find more than enough compensation in being the first known example of a man who actually lived part of his life in the future!"

The next few hours were devoted to setting up a series of tactful approaches to Brandon according to his mood the next morning. But when they reached the mansion, they were informed by the butler that Mr. Brandon was not at home.

Bright asked, "Will he be back very soon, Sanders?"

"Perhaps, sir, in a few days, perhaps, sir, in—"

"A few days!" Jack roared. "That's impossible."

The grey, impassive face contemplated them. "—a few weeks, a few months. Those were Mr. Brandon's exact words. He left no forwarding address but said he will reach you when he feels so inclined, sir. Mr. Brandon also said you could leave or remove the contents of the sequestered tennis court as you may see fit. Mr. Brandon left this letter."

Jack ripped it open and the doctors backed away from Sanders to read the note. It was in a near-hysterical scrawl:

The pain becomes constantly more unbearable. I feel tempted to make experiments further into the future and each time I try now it works—even up to 24 hours—but the cost has been dreadful. Why should my intelligence and will power be so superior to everyone else's? But you two have imposed additional burdens on me without offering a cure as if I were a magnificent specimen for experimentation. Well, I won't accept it any longer. When I do return I expect to see results. Meanwhile, I'm not thinking about anything because I intend to live longer than both of you combined.

And do not try finding out where I have gone from the servants; they do not know.

Brandon

"Where did Mr. Winthrop go?" Foster asked.

"Mr. Brandon told me you would ask, sir. I do not know."

"But you must have some idea;

it's vitally important!" Bright protested.

"I have no idea, sir," he said, impassive as ever.

After 15 minutes of pleas and threats they gave up and returned to the city. "We were stupid, letting him out of our sight," Jack moaned. "The man with the most precious secret in history! If he should die, it dies with him. It's too subtle a secret, Quincy, for any autopsy of dead matter to uncover. Our only chance will be to examine the living brain when I operate to ease the pressure."

"Don't discuss him as if he's dead," Quincy shivered. "The man's difficult to handle but when he comes back we'll have our chance. Just think of it, Jack, other people may have the same potential, and the three of us together will be able to show them how to tap it—he has to come back!"

But four days passed and he did not come back.

Then at 2 A.M. of the fourth night since his disappearance, the phone in Jack's bedroom rang. It was Brandon, speaking in a thin, frightened voice: "Foster, come quickly with Bright. I think I'm dying and only you two may be able to help. Just woke up and suddenly it came to me."

"You're *not* dying. Where are you?"

"Nevaton Island in the Bahamas, hire plane at Nassau, seaplane. I'll pay, pain." Then he hung up.

It seemed to take hours to reach Bright and everything at that late hour took extra time—getting cabs, meeting at the airport, finding a plane to hire for the Nassau flight. Then in Nassau there was the further complication of making a seaplane pilot understand that a flight right now meant right now, not that afternoon. But at last they were en route to Nevaton, and it was Quincy's turn for self-denunciation. "I should have known how to find out he had a property down here."

"You couldn't have," reassured Jack. "Brandon creates secrets faster than anybody could ever uncover them. Quincy, something just struck me: here's Brandon more and more ultra-sensitive to the future and seeing further into it. He begins to see death ahead. Moving toward it, what does he then see?"

"The other side!" gasped the older man.

"Maybe."

Bright jumped to his feet and ran to the cockpit. "This plane's too slow," he said. "Speed it up!"

The pilot shrugged. "This is its top limit. Please return to your seat."

When they landed at Nevaton it was less than nine hours from the time Jack had received the call but seemed closer to nine

days. Another seaplane was resting on the water. "Sir Alec Blum's here," explained a bandanaed servant. "Mr. Brandon is ill."

She led them to the one building on the small island, a pretty Georgian structure built to take advantage of every breeze. She passed them on to a very distinguished-looking gentleman of about fifty. "Too late," he said gravely. "I'm Blum, too late already when I arrived. He was in deep coma, endless stream of words, though, none of them comprehensible, never heard words pouring out so fas . Just died a few minutes ago." He shook his head unbelievingly. "At first I thought it was a stroke, but that's simply not possible. There were symptoms enough for that diagnosis—but stroke symptoms don't move from one side of the body to the other every minute!"

The two other doctors followed him down the gleaming white hallway decorated with flower sprays that must have been brought in from beyond this sandy island. "Maybe, though, his expression will give a clue to what he saw," Jack whispered to Quincy.

"What he *saw?*" asked Sir Alec, turning his head slightly toward them. "If he saw anything, it must have been everything at once."

"What?" they both began.

"Best for you to see for yourselves," said the Englishman, opening the door of the death room. Three steps brought them to the side of the bed and they stared down at Brandon's face. On the right side it had almost returned to its former rotundity, and all the lines seemed to sweep upward in beneficent joy. On the left all lines drooped like an ancient mask of tragedy and the eyeball stood out, close to popping from its owner in horror at what it had seen, if there had been anything to see.

The author of this joyful fantasy (perhaps jovial is the more appropriate word; either way, it's good fun) writes that he is "vice president of an advertising agency in Atlanta. I've published five novels, THE STREAK; THE BEGGARS IN THE SUN; GLENPORT, ILLINOIS; DEADLINE; PARTON'S ISLAND *(all Macmillan), a collection of short stories,* A MILLION GUITARS *(Little, Brown), about a hundred stories in 'all major mags' as they say. Married to a charming redhead; three sons, Shawn, Patric, and Terence. Vastly prefer the company of the late Lord Dunsany to the shabby guesses of the extant McLuhan."*

The Fabulous Bartender

by Paul Darcy Boles

HE WAS THE BEST MAN I EVER hired; no exceptions. Of course, as they used to say about printing in the old days, it's a good, loose trade—a bartender, if he's got anything at all, can move with the wind and his whim. Me? I'm Joe McMurtrie—been in this one place on the avenue for thirty, thirty-one years. Sure, even in Prohibition. But I won't bend your ear with those old rough times; all I want to say is, I've seen 'em all—the smooth and the rough, the quick and the slow, the fat philosophers and the agile boys, yes, and the steal-you-blind kind, which come in all shapes, sizes, religions, colors—and he was the best. He'll always be.

My clientele—as the fancy articles say—isn't big. But regulars, I've got. They get raised here and move away or die off—though you'd be surprised how long it takes a good drinker to die. What they look for is me to talk to 'em, and my bartender to get along with 'em, and honest drinks, and a nice eye for trouble. Even an old regular can get into hot trouble. That's the way I met Backy, the man I'm telling you about. See, it was a Friday night, about five, just the edge of evening, the time when the place starts filling—and old Mike Chapman, pushing sixty-five, was on his fourth or fifth Irish. I won't say he's a contentious

man—loud, sort of. Anyhow, he was swaying back and forth a bit, holdin' forth about the cheap grifters and two-bit politicians in the neighborhood, when all at once this young chap—big biceps, no tie, black jersey, high boots, and nursing a beer—turns around and says, "Can it, grandpa!"

Mike's eyes got as red as a prize bull's, and he rounded on the young cat in a kind of ponderous battleship way, and he says: "You cheap hood, get outa decent law-abidin' generous and honest bar. Go smoke some mary-juana or kick your mother in the teeth, if you can find a mother or ever had one—or was you knitted?"

I'm down at the end of the bar going over the cash-register chits—I allow a little credit, up to a thoughtful extent—and I knew I'd be too late to go back and get my hands on my sawed-off, lead-packed bat and cool the kid. He was already out of his seat and charging toward old Mike. Something really nasty could have happened right then—because my last bartender had quit that afternoon, going into one of these semi-hooker-haunted lounges down the block, where you get rolled if you use the telephone booth. I was just starting to holler—I have a fair set of pipes, when needed—when the door opens and this big, broad-chested, grinning and noble man walks in, with a sort of roll like a great, ancient sailor, and sort of absent-minded, kicks over a chair which falls in front of the tough kid, sending him down neat as noodles.

By that time I'd got my hand around my bat-handle and I'm halfway over the bar. Mike subsided where he was, starting to laugh—and the kid lies there, his boots waving a little in the air. I hoisted him up. I had him by the collar of the jersey, and his hair didn't feel to me as if he'd washed it for a spell. I says, "Out you go before you're truly cold-cocked, big man. You don't talk to your seniors like you just done and get away with it, not in my place."

He starts to yap, but I hustle him to the door and out—and I figure he might be back, bringing one of those muscle-and-grease gangs with him, but I also figure I'll take care of that hurdle when it comes. I wheel around to the great, huge-shouldered man who's helped me out. I said noble, didn't I? It's a good word, because that's what he was. He wasn't wearing much of a shirt—a kind of flimsy blue thing you'd swear he could have swiped from a ladies' boudoir, but he wasn't any fag, either, you could tell that fast. He had muscles that were covered with fat, all around the chest and down the forearms. His eyes were black as tar, and just a trifle turned up on the ends as though

somewhere along the line he might've had Eastern blood. While I'm at it, I'll tell you I wondered about the rest of his costume, too—you couldn't call it "clothing" because it wasn't quite that. His pants were more of the same gauzy stuff—sort of floating and funny. And he wore the damnedest shoes I've ever seen—not quite sandals and not quite tennis shoes, with thongs that whipped around his fat calves all the way to the round pink knees. But he was all man, and right now he'd joined old Mike in laughing, both of them laughing fit to die. You know how some people have a special laugh—they laugh at you, maybe, and there's something throaty and huge about their laughter, so you start laughing, again, in turn, and then you've got a ha-ha thing going, the kind you can't stop? Buddy Hackett has a laugh like that. This man did too—all of a sudden *I* joined in, I couldn't help it, and there we were, whooping it up like fools.

I went back behind the bar and leaned on it, my shoulders still shaking, and old Mike started wheezing for breath, so I finally had to lean over and pat him to keep him from expiring right there beside his drink. "Here," I says, recovering myself, "the drinks are on the house. Sir," I says to the fat noble stranger, "I thank you for your nimble footwork—those kind of punks are dangerous sometimes, and he almost caught both me and Mike off guard." I poured Mike a new Irish. "What's your pleasure, friend?" I asked the big man.

"Why, wine," he says, in this voice that, like his laugh, had a tingle in it—a kind of music, a ringing as though you heard it again, high up in some blue hills, in an echo. "Black wine or purple," he says. "Or just some house wine. And if you've no call for that, and don't keep it I'll take any alcoholic elixir on your handsome premises—for shouldn't we all be able to drink the liquor of any country, in amity and friendship for its universal balm?"

All that he said in the one quick-tripping tingling way, still smiling open and free, and he sat down at the bar and leaned back, taking up a spread big enough for two men. "For I've watched the drunken shepherds at their play," he says, "and I have seen them become brothers even though they began the spree with murder in their hearts. The leveler, the joy, the thirst-quencher, the man-lover," he says. "Wine!—or its approximate facsimile," and he laughs again.

I said, "I've got some sherry here, but it'd take the tongue off you—ah," I reached for a bottle, "here we are—this stuff's from Italy, grappa they call it. Would you like a taste of that, now?"

Those slantwise eyes shone and the eyebrows above them, black as pitch and curly as thatches, went up two inches. His heavy, powerful, cupid-dimpled hand curled around the bottle while I whisked up a glass. "The elixir," he murmurs. "The deep gold of it, sea-ringing, heart-soothing." He didn't even pour a glass. Just tipped the bottle back and let his throat open up—he looked like the original chug-a-lugger of the world—and Mike and I could hear just the glugging as he swallowed. He must've drunk a pint without taking his lips away. Both of us stopped laughing, knowing we were looking at a real drinker—one of those fabulous characters you often hear about, but seldom meet. He clapped the bottle down on the mahogany, and says, "Excellent! I am sorry, friend; I was carried away. It's been a long, hot, dusty journey from my home."

"Well, you could live in Brooklyn Heights and that swig'd still cool you off," I says. "But I'm no skimper, and you did me a favor. Take the rest of the bottle. I get small call for wine anyhow—except when a few old grandmabiddies come in and yack it up, once a year or so around Christmas. Tell me," I says, as he clutches the bottle and starts tipping it back again. "Tell me—you ever tend bar?"

He nods, while drinking; his eyes are set wide apart and just a bit walled, like a prize steer's. "True," he says, having depleted the bottle terribly this trip too. He looks at the remaining slosh of wine, lovingly. "I have been the host to vast enjoyment, delirious truth," he says. "I have the touch of grace in my serving, and I can keep peace, and further, I can promote happiness—the pure happiness that should always travel along with the drink. For look around you," he says, straightening, waving a chubby hand hard "—in most bars, up and down this block, what are people doing? Either they and their doxies are utilizing the bar as a prelude to love-making—which is an end in itself, and requires no special fiery drink—or they are contemplating their own problems, bearing these with a cloud around them, as if each wore individual halos of thick gloom. They are not together with their friends—they are not savoring the richness, the freedom, of human companionship in alcohol, not truly relishing either the grape or the grain!"

Old Mike's wattles shook as he nodded. "Think I get you all right, sir," he said. "You mean they just ain't livin' it to the full."

"Ah, the full! That's the truth and tragedy of it," says our new friend. "Once, man was unafraid to laugh, to cry, to love—to grasp a woman in both hands and bring

her to him, one on each flank, like *this*! Once, when he came to the dark sea, he fell down and worshiped it, tears running down his cheeks for the glory he was sighting—'The sea, the sea!' he said, crying for joy, his heart afire and bursting with the madness of it. He has lost the capacity to be himself, to be what all the gods desire!" He tipped the bottle far back and swallowed and then belched—even his belch was like a laugh, it had so much enjoyment in it. When he nodded, all his tight curls bounced. "Yes, sir, I can tend bar," he said.

I says, "Well, look, sidle down here and maybe we can do a little business, all right?" and we excused ourselves to old Mike, who sipped his Irish and smiled quiet to himself. We went on down near the cash register and talked. I swear, he could talk so it made your ears thirst for more, but all the time you, yourself, weren't finding out a lot about him. It was a spate of talk—not Irish; they're a different brand of blarneyers—and it made you happy to hear it, like you were on a smooth white beach with big combers sounding in the distance, in the dawn of time. A time we've forgotten. It was poetry, what he said, but it wasn't a-tall practical. I mean, I never did find out where he lived—only that he came from a big family. He could have been any age, too—sometimes he looked just eighteen, then again, he could have been one hundred and twenty-six, or even older. Upshot of the whole thing was, though, we settled on a decent amount of loot and all he could drink—I could tell I was sticking my neck out there—and he said he'd start right in. So he came around back of the bar and it wasn't till I started to introduce him to old Mike—my new bartender here—that I realized I didn't know his name. "What is it?" I says. "I can't go on calling you 'sir' and 'friend' forever. You call me Joe, and that's Mike, and what's yours?"

"Backy," he says. Or it was something that sounded almost like that, maybe with more guttural in it.

"Well, Back, old Backy boy, glad to have you aboard," I said. "Now here's the bar-brands over here, fair brands for bar liquor, but I believe in treating my customers right. And there's almost the same markup. And I'll show you where we keep the cases, in the basement—" But even while I was showing him around, I had the tingling feeling—like his laugh—that I'd done a great stroke of work, hiring him. You have that feeling sometimes. It's what makes horseplayers poor. It's what makes them happy, too—keeps them going, you know?

That first night he proved him-

self all right—though it wasn't a patch on what the nights got to be. I don't ask my bartenders to open up; I do that myself, for the poor rummies who've got to have it, at eleven o'clock every morning but Sunday, when we're dark. But I do ask my bartenders to do an honest night's work, keeping up with everybody and every thing—and I will say he did that, the first night, plus.

Along about six the place really started getting full, and Backy spun the drinks out fast and neat, seeming to be in a lot of different places at once. But it was the effect he had on the customers that got me. Just a quirk of his lip, a glisten from his eye, and even the glummest small businessman, worrying about getting the Better Belting contract out of Poughkeepsie, seemed to straighten up as if he'd had an electric jolt down his spine—and start looking younger and ordering faster and enjoying it more. Young guys who'd just had the big iron fist of the world waved in their faces seemed to get younger and fresher too—seemed to turn into themselves, for once. Girls who were half on the edge of being hookers—but the nice easy unprofessional kind—got a glow, a sparkle and a radiance it's hard to tell you about unless you've ever seen it happen. They were like roses opening to fresh days. Even a couple of old-whore customers—nice whores, honest women—Nancy and Roz, seemed to perk up and looked good and halfway luscious. They picked up customers very fast. My friends the precinct cops came in and remarked on how the joint was jumping for joy—O'Meara, the oldest, couldn't get over it. "It's like my father used to describe it, the way it musta been in the old country once," he said. "Everything relaxed but full of zing and sweetly entertainin', in the public houses. I never thought I'd see it on this avenue."

You could feel it all around you in the air. It made the back of your neck prickle with the fun of it.

About ten thirty, the juke box went out. It's always doing that on big nights. I hustled back to the phone to call the Ace Electronic Music Corporation, Inc., the way I always have to do, but Backy stopped me just at that second. He was balancing a tray of drinks on each hand, and in his eyes there was that wild glorious look he'd had when he first rolled into the place. He said, "Joe, let me furnish the merrymakers their music?"

"I didn't know you played," I says. "But then, I didn't ask you. You got a horn here, or do we have to bring in a pi-anna?"

"A horn," he said. "You will see. Or better, my good brother Joe, you will hear!"

I brushed on past him, keeping up with business, and he made his tray deliveries—I could hear his tingling voice going all the while and hear people laughing when they answered him back; more people were flooding in the place all the time. It was just a few minutes after that that I heard the first notes—like a flute's, but sharper, brighter—come out of the alcove toward the back, where on special occasions I have a pickup band in to play. I guess everybody heard those notes. They were like ice, so cold and pure—they came sailing out of the alcove like young birds. Then there came a whole rippling shower of them, and then he went into his real music. I never did hear any of the tunes he played, anyplace else. I know a good entrepreneur, as they say in the fancy part of town, could've made his living by signing Backy up with M.C.A. or some corporation like that. I moved on back toward the alcove—a lot of people were drinking back there now, just picking up their drinks and walking that way as if they'd been on strings pulled by Backy—and there he was, with this little collection of pipes held together by what looked like a few strands of grass. I mean, it wasn't a flute; I suppose you could call it a crude old-fashioned mouth-harp.

His head back, his black eyes shut, and his curls looking like the quiet horns of old-fashioned cattle, he was playing this great tune that made your bloodstream happy in your body. It wasn't loud but I'll never forget it—it tweedled, tweedled away in your soul. Fire and ice and everything was in it, and I remembered all at once that years ago I'd been a devil, a ding-dong limb of Satan with the women—I remembered a long-legged, full-breasted woman with gray eyes waking up beside me, and me rolling over on her, and how we laughed aloud for the joy of it in the great moment. All around me, as I heard and watched, I could see the same glisten and shine in the eyes of all the people there, the young, the old, and suddenly someone beside me—a nice lad it was, young Cohen from around the corner at the dress company—had grabbed hold of a girl and they were dancing. Grave and yet joyous dancing it was; it put the heart in you to shouting for everything it is on earth to be a man and to be a woman. When the tune was over and Backy had dropped his chin and stopped looking at the sky through the ceiling, and was holding that set of pipes light in his fat fist, I called, "Backy, what's the thing you play? What's that instrument called?" He could hardly hear me, though he had sharp ears and they even looked sharp. For all around us customers were applauding fit to shake

the bricks of the building apart—among them, the cops. He said, "Joe, my brother, this is a syrinx!" He held up the pipes—they glittered with his spittle and they looked like thorny branches of true live wood. "And now," he shouted in that voice that could raise the flesh on the back of your neck and yet was happy and reaching as a war cry, "now before I return to serving, the wine, the wine, I'll take my pay in the great smooth wine!"

He drank five more quarts of the grappa, that night. I should care. We did a business that would have made a dance hall on the Klondike look like a W.C.T.U. convention by any comparison.

Business kept on going just like that, every night but Sunday. I don't know if it's true or not, but I did hear there were more illegitimate children born in the months that followed than had ever before been heard of on the avenue. A course record, so to speak. Sometimes when Backy was playing his syrinx between bouts of serving drinks, you'd have sworn there was enough bursting life in the place to populate a new planet—and you can't expect everybody to think of using common-sense stuff such as the Pill, at times like that. They just got carried away, on the crest of a sweet salt wave, was the way I figured it. So let 'em enjoy it, was and is my philosophy.

There weren't any riots or any fights. I didn't have to use my sawed-off lead-filled bat once while Backy was there. In the times before there'd always been rumbles of one kind and another—just meanness pouring out—and I'd had to exercise the old wrist considerable on certain evenings. Not any more. Even when the amateur hood who'd insulted old Mike came back in, with his gang, spoiling for trouble, one wheedle of Backy's pipes was all it took to bring a faraway look to the eyes of him and his grime-fingered pals—they sat there dulled-looking as hypnotized sheep, and finally each picked up a slim-legged girl and floated off into the dark.

Sometimes we'd get the usual percentage of fags—you do, anyplace on the avenue—and they'd sit up as though they'd been shot, at the first notes, then start smiling, and pretty soon they'd waltz out, as though they swam through clouds, holding hands. They didn't carry on their usual screaming-mimi stuff at each other, and have catfights in the corners, I mean.

And profits—well, I'm not greedy, but I could have retired to Far Rockaway or someplace, in about a year, if it had all gone on. Except I had no feeling of wanting to retire. For the first time in maybe about thirty-two years ev-

erything was fresh and gleaming to me—I looked forward to opening up the place in the mornings, to getting to work. The very smell of the place seemed different—as though somebody had spilled young grapes around it recently.

And it got even better when Backy brought his cousin in. Wait a minute though—I don't know if she was a cousin, or some other kind of relative, or just a friend. Though I'd swear they were related. One night, he said while we were having one last drink before locking up, "Joe, my friend, you need another assistant. One who is trained to bear the cup and who loves it with every atom of her body, down to her rosy fingertips."

"You mean like a cocktail waitress?" I said.

"Like that," he smiled hard and fierce. "But with a little something more—a bursting joy no one can purchase. I will bring her in tomorrow evening, Joe. Is this acceptable, my brother?"

I figured I could hardly turn him down, after all he'd done for me—and anyhow, it'd give him more time to lay down the music, which was one of the reasons why we were jam-packed to the walls every night. "Sure," I said. "Bring her in—you running out of grappa, you wannta order some more when the man comes in this week?"

"A few cases," he said carelesslike. "But any alcohol will do—even the dustiest grain has the taste of the true vine, when it has been vinted with care. Hoho! May the earth and the sea and the sky bless you, Joe—!" And he was gone, those fat broad shoulders filling the door as he left, him turning around outside on the walk to tip the bottle he was holding back, and to wink one eye at me before he disappeared into the dark. I never did find out where he lived. It was down toward the direction of the park, and sometimes he'd come in shaking grass blades and twigs out of his funny blouse and fine gauzy pants, so I knew he fooled around the park sometimes.

Next night here came Backy with his—well, his friend or relative. In some ways she looked a lot like him—same blood, I mean; somewhat the same eyes, only hers were blue, so blue they could look right through you, but with that same curious slant at the corners, that same width between them. God, she was a looker. She wore a gauzy thing too, only it was a full dress—a little full, but not so full you couldn't see those rose-colored and creamy thighs, and those uprising breasts like puppies with a very high pedigree. I swear, I'm not the age ever to be horny again—I'm like old Mike that way—but all the same, you couldn't help having keen memories.

Backy bowed deep, creasing his

belly, and he had a firm, huge belly to get creases in. "Joe, this is Hebe," he said.

"Charmed," I says, meaning it.

"The cup bearer," says Backy. "She it is who will serve—it is her right, her need, more than her profession."

"Well, I can pay her a little," I says. "I mean, I'll make a fair deal, the way I did with you when you came aboard, Backy."

"There is no need. Her pay is her satisfaction in service. Wine," he says to Hebe—she didn't look one whit Jewish to me, but who can ever tell, and what difference?—and she whirled with the draperies floating out around her legs and made for the wine bottles behind the bar. Backy was partial to grappa, as I've said, but lately he'd also brought in some off-brand he kept calling Falernian—I don't know where he got it. It was fiery as a brandy and a real throat-splitter and he drank it uncut—"The unmixed wine," as he said with a drooling lip-smack. Hebe brought this out in a silver cup which I guess she'd brought with her, and her expression as she watched him slug it down was so loving and satisfaction-taking it almost made you mist up. I figured if she looked at customers like that while she served them, we'd have to find a way to expand the place, even though footage on the avenue costs like pure gold.

That's about the way it turned out, too. I don't mean I expanded the place—but we had so much business after Hebe came, the line went all the way in both directions down the block. Because Backy had more time to make with the syrinx and Hebe was so popular, from the start. She didn't talk much, just mooed and murmured a little from time to time, but the way she'd stand there when she served you, looking ready for anything at all—and glad to give it—was enough to turn your heart over in your chest, like your own pet porpoise playing. And then when Backy came on, with his music knifing sweet as a wild old dream in your eardrums, it made a feeling as though you'd come home at last, after years of wandering abroad—and getting shipwrecked, maybe, and all.

Things happened in the neighborhood. (I've told you about the out-of-wedlock births that came later.) Old Mike Chapman got himself married again—to a kid of seventeen or such. One night he got hold of one of the vine-leaf hats that Backy'd started bringing in—they made nice hoopla gifts for favorite customers—and took off most of his clothes. It was cold out and when he started peeling that ancient winter underwear it was a sight to see. He wasn't wearing anything much but the vine-hat when he left the place,

and he got picked up five blocks away. It was a good thing O'Meara did the arresting and changed the citation before it got to the desk. "Otherwise," the way O'Meara told me, "how the hell would they ever believe all he had on was a little round vine bush—and they'd never have believed where he was wearing it by then!"

A social worker, name of Quackenbusch, a bony lady with quite a few years on her, did a strip about like old Mike's—except she didn't happen to be wearing long johns at the time. We managed to get her dressed all right before she got out of the place, but she tried to steal a donkey from a little cart-peddling man a couple of streets from the avenue. O'Meara couldn't figure that one at all; it fazed him. "She kept yelling how she was gonna return the donkey to some old pal of hers named Silenus," he told me. "But for God's sake, that ain't the name of the owner. She'll be okay; just don't serve her for a coupla weeks," he said.

One night in the middle of one of Backy's longest solos—it was a number that made you want to shut your eyes even while you were serving, a thing that seemed to take you back to warm gold shores and give you a glimpse behind your eyelids of white marble temples on dark green hills in the sun—in walked this animal that'd escaped, it turned out, from a zoo way down in the park. A leopard, as I live and breathe and pay my debts. It didn't hurt anybody. It just ambled up to the alcove where Backy was giving out and rubbed itself against his fat sturdy legs like a big lovely housecat. He took it back to the park himself, later that night, talking to it all the while, and it answering him with soft yowls, as though they understood each other real well.

But I'm coming to the sad part, and least said, soonest mourned.

You remember that winter before last when it finally got to the brass monkeys? Coldest winter since the eighties, everyone said. Frost all up the windows, Christmas coming, times of cheer all right for a good bar; but right then, three days before Christmas, Backy rolled in—hadn't ever made any concession to fashion, was still wearing his gauzy blouse and pants, except he'd picked up a bearskin or maybe a black wolf's pelt which he wore casually over one shoulder. Hebe was with him, both of them blue-lipped with cold. "Well," I says, "I want you to try a Joe McMurtrie eggnog, richest on the avenue, and it'll put heart in both of you."

But Backy shook his head. His wild eyes were even wilder; tears were moving down his cold red cheeks. Hebe, that beautiful, beautiful girl, looked as sad as a spectre at a miser's wake.

"Joe, my brother, we will take

only wine with us. It is time for the long journey back, to our homes, our hilltop," he says. "Give Hebe your best wine. Over the dark sea, now—" and he pulled the syrinx from his blouse, "—until the golden shores rise up on our sight in the pigeon-breasted dawn!"

I knew he meant it. You can always tell when the good ones are going. I gave Hebe two cases of the best—one the Falernian he'd ordered, if that's the name of it—the other that mule-kicking grappa. She shouldered them, gracefully, and he bowed deep, and she did a little dance then as he came up from the bow and started playing his syrinx—a little dance with those cases on her shoulders, weaving around him as he moved to the door. In the door he held up a puffed, fat, firm hand. "We will come back, my brother," he said in that tingling great way. "We will always come back."

Then they were gone, him playing one of his wildest, darkest, yet most wonderful tunes. I hear it in my sleep sometimes. Only in the earliest morning, before I'm all the way waked up. Before I lose it. I did get a card last year—well, if you can call it a card; it was in an envelope, just a leaf with some funny writing on it. Looked like Yiddish, but not quite. The envelope was postmarked someplace like Olympus, and there are two or three towns named that in this country, but I don't think it was from either of 'em.

But he was the best man I ever hired, no exceptions at all, just like I was saying. I've known them all. He was in a class by himself, absolutely.

Want some more ice in that—or shall I sweeten it up a little?

ABOUT THE COVER

It is not clear whether the robot's post-holocaust collection of F&SF is complete, but he appears to have enough good reading for some time (e. g., in the foreground is the March 1958 issue, with stories by Shirley Jackson, Robert Bloch and Poul Anderson, among others).

This latest of Mel Hunter's robot series is a preview of a cover that was done specially for a new anthology which celebrates F&SF's 20th anniversary. The book, TWENTY YEARS OF FANTASY AND SCIENCE FICTION, will be published late this Spring by G. P. Putnam's.

G. C. Edmondson's offbeat "mad friend" stories have appeared here at infrequent intervals for a good many years; time, we felt, to ask the author for a few words of background on the series:

"The part that nobody's willing to believe about the mad friend series is that they're all true. Not even my friends among the old pros were convinced until the mad friend actually showed up at a convention last summer and proved at least to some of the ladies that he was not a figment of my imagination.

"I'll not go so far's t'say everything happened exactly and in the same order as the stories are written, but life is usually less tidy than literature—especially as lived in some of the godforsaken creationis ani *where my friend and I have been called to show the flag and snow the natives as per our other, non-literary occupations.*

"The stories are actually a sort of literary crossword or, musically, a fugue: Two or more separate melodic strains which occasionally intersect as they spin out in separate orbits, hoping to hold the involved reader on the edge of his seat waiting for everything to resolve with one magnificent final crashing chord."

Nobody Believes An Indian

by G. C. Edmondson

TWENTY-FOOT-CEILINGED rooms surrounding a fountained patio, wheelbarrow and sand tastefully concealed behind bougainvillea of pornographic brilliance. White-coated boy bringing beer to the shady side when the hotel's tranquillity was disrupted by a man in a spacesuit.

The spaceman came into the sun-drenched patio and was merely a motorcyclist in full racing-leathers. He pulled off his brain bucket and behind a guardsman mustache I saw my mad friend. "When'd you start wearing that stuff?" I asked.

My friend squinted into the

shade. Sinking into a chair, he said, "Comes a time in every man's life when he's seduced by the thought of living another twenty-four hours. What're you doing here?"

I was explaining our troubles with the tracking station whose grid covered a square mile of delta land when some moderately grabbable women appeared. "Guess who's here," one said. Then she saw my mad friend.

A waiter banged and scraped extra chairs in place. "Two triple X and one coffee," I said.

"You remembered our song," my friend murmured.

"Why the spacesuit?"

My question was answered when the desk clerk and a waiter wheeled an immense, police-style motorcycle into the lobby. "Aren't you a bit old for that?" I asked.

"Speak for yourself, dad."

Waiters finished positioning the bike. One scattered sand beneath the engine.

"What's that sand pile doing in the lobby?" a wife asked.

"Taxes go up when they're through building. Ergo, a hotel in this country never quite gets finished."

"I like this place," my friend said.

Considering what would be left of a motorcycle after parking one night on local streets, I could see why.

The waiter returned. My friend accepted coffee with a wistful glance at dark-foaming beer. I was raising my glass when a shadow fell across the table. The short, dark, and very fat man wore a business suit and a felt, go-to-hell hat which Mexicans call a *sombrero de cuatro pedradas*—a hat that's had four rocks thrown at it.

"Don Pancho!" he exclaimed, and opened his arms. My friend returned the formal embrace and introduced us. We exchanged names and promised eternal fealty. He bowed to the ladies and the waiter hastened with another chair, Cutty Sark, and an old-fashioned seltzer bottle.

"Gen'l Marquez is at home in several Indo-European tongues," my friend warned.

"More like a paying guest," the general said in English. "I'm only at home in Amerind."

"To become a general," I hazarded, "takes a large slice out of one's life. How did you find the time?"

General Marquez settled in a chair. Squirting soda over scotch, he lapsed into Spanish. "You have heard of *generales de división, generales de brigada.* I am a *general de dedo.*"

"Finger general?" a wife echoed.

"One day Pancho Villa was short of officers. He pointed his finger at me and said, 'You are a general.' "

The story was an old one but this was the first time I'd heard it from a general.

"He fights a different war now," my friend said. "Against the thousand and one enemies of the tomato."

"You're a planter?"

"In a modest way. I have a thousand *hectareas*."

Before a wife could ask, my friend said, "Four square miles."

The general finished his drink in two gulps. He sighed expansively and after a moment asked, "Would you like to see the ranch?"

Wives were not enthused at the thought of tomatoes under a delta sun. Nor did the prospect awaken boundless joy in me.

"Come along," my friend said.

"Why?"

"You'll find it interesting."

I sighed and stood up. "If we're not here when you get back," a wife said, "we'll be somewhere else."

Out in the street stood a dusty jeep sans muffler. I looked at my mad friend. "If you think I'm going to—" but desk clerk and waiter were already wheeling out my friend's motorcycle. I studied its hydraulically damped frame.

"They've changed since you got your scars," he said.

It looked softer than a jeep. I strained my leg over the saddle. Electric starter whirred and my mad friend tore off like a striapygous ape, leaving desk clerk and waiter agape in the dust. "Must live up to my image," he shouted apologetically. Once out of town he settled down to a pace more suited to that miserable parody of a road.

"What are you up to down here?" I shouted over his shoulder.

"Have you head of Operation Intercept?"

"Most assuredly," I shouted back. Uncle was pressuring this country to discourage pot farming by creating colossal traffic jams at the border, disrupting the economy on both sides, and treating citizens like criminals. Official philosophy had it that citizens would pressure their own government to do something about pot and pill suppliers.

All it really did was anger a race well aware of the American factories which unrestrictedly export pills to the border whence they work their way north again for illicit sale.

"So you're helping the local army napalm the pot farmers?"

"That's why they sent me," my friend said. "But you know how it goes."

I did indeed. Each year some poor sucker's fields, be they of pot, alfalfa, or strawberries, are saturated with oil, fired, and filmed from enough angles and exposures to make footage for the year's anti-pot campaign. The

photography has been known to convince some foreign journalists.

"What's the general growing besides tomatoes?" I asked.

"The general has been affable, correct, cooperative, and has done everything he can for me, short of actually letting me see what's growing in his fields," my friend said.

"So I'm your witness?"

"Two missing Americans are harder to explain than one."

The Harley hummed across the delta through paths that snaked between towering reeds and cattails. Finally we broke into cleared land and I squinted across monotonous miles of maturing tomato plants. Outside an air-conditioned office I saw the general's jeep.

My friend razzed the Harley, retarding the spark until it backfired twice. By the time he had the kickstand down the general was beckoning. We rushed into air-conditioned coolness before we could start sweating.

One wall was covered with maps. "Here," the general pointed, "is where we are. Here," pointing elsewhere, "picking is in progress. If your government doesn't change customs regulations and pull the rug out from under me again, I may make a profit. And here," pointing at another spot near the center of the map, "is where we had trouble last year."

I was settling into a chair, trying to relax accumulated strains out of my back. "Bugs?" I asked.

"There was an infestation," the general said.

"Is that where you had to do some burning?" my friend asked.

"The government was kind enough to cooperate," General Marquez said. I assumed this was his face-saving way of explaining that he had been that year's pigeon for the filming. "Would you like to see the area?" he asked.

Frankly, I think one part of a tomato field looks much like any other part, but my friend was on his feet again.

Thanks to irrigation, the paths here were not dusty, so we followed the general's jeep. The trouble spot had gone to weeds. Inside forty fenced-off acres, burros grazed.

"Can we go in?" my friend asked. He was about to ask again when he noticed the general peering intently, mumbling under his breath. Then abruptly the general was with us again. "Of course," he said. The driver opened a makeshift gate through barbed wire.

The general walked warily, like a man in a mine field. Suddenly he stopped to pull up a tiny plant which struggled among the assorted milkweeds, burdocks, and *quelites*. "Stuff grows everywhere," he said, tossing aside a lid of potential pleasure.

"Even without planting?" my friend enquired maliciously.

"The birds and the bees," the general said. "Only it's mostly cattle and burros distribute the seed in their droppings."

Our cautious stroll progressed and he uprooted several more plants. Even my mad friend was beginning to droop. How did the short, fat general stand the heat? Finally we returned to the air-conditioned office. The general produced beer and a bottle of mineral water for my friend. When we had savored the cool darkness for a moment, he said, "Now you must dine with me."

"But our wives—" I protested.

The general waved my objection away. "The Cadillac has already picked them up."

Cadillac or not, I was distinctly uncomfortable at the thought that our entire party was now in the general's power. Glancing at my friend, I knew the thought had crossed his mind too.

"Shapiro will have kittens out at the tracking station if I don't report in soon," I said. To my surprise the general handed me a telephone. After clicks and buzzes of an astonishing volume I received an even greater surprise when Shapiro answered.

"I'm dining with friends at Gen'l Marquez'," I said.

"Oh?" Shapiro plainly didn't know what business of his it was where I spent my evenings.

"How's it acting?" I pursued.

"Same damn bogie," Shapiro groused. "Too low and fast to be anything in a natural orbit. You suppose a comsat signal could be heterodyning with some other carrier?"

"Feed it into the black box and see what crawls out," I said.

"What d'you think I've been doing for the last month?" Shapiro said disgustedly.

I rambled on and managed to repeat where I'd be that evening. Finally I hung up and the general cheerfully commandeered the phone. Twenty minutes later the three of us crowded into the air-conditioned comfort of the big car's back seat. The general's chauffeur deposited us at the *casa grande*. I wondered how the wives had enjoyed his driving.

Stepping into the *sala*, I stumbled over a large conical rock. It looked like the lapilli which occasionally shoot from volcanoes. Wives were in the patio sipping Gibsons with a small, very dark woman who could only afford that dress if she were the general's wife, since she was too old to be his mistress. As we walked in they cut short a discussion of whether boots could properly be worn with the new botch-look.

The house dated from a day when the general and his likes had entered such premises with hat in hand. He caught my glance. "My father was a servant

here," he said. "Slave is a more accurate term."

"And you?" my friend asked.

"Ran away to Texas." The general sighed. "That's where I really learned to live like a dog. When Madero and Villa were ready, I was too."

My friend smiled. "And now you invite us into your home."

The general glanced at wives and lapsed into the language they were speaking. "Every gringo comes to strip this country of its treasures," he said. "You show better taste than most."

A *criada* poked her head into the patio and said something. "Dinner's ready," the general translated.

"What was that?" I asked, "*Huichol* or *Cora*?"

"*Cora.*"

"You speak it well?" a wife asked.

General Marquez smiled. "Until I was twelve I spoke nothing else."

We filed into the *sala.* The table was a masterpiece of intimidation, with a salad centerpiece which looked as if it had been assembled by a hairdresser. I studied the array of forks by my plate and tried to remember if one works inside out or outside in. Under the table a wife was sending frantic podograms. We were in for an ordeal of the tasteless Parisian put-on which Latins use to impress one another. Even when they import a French chef, the result is hopeless.

The general's wife deftly parted lettuce leaves which gave the centerpiece the appearance of a gigantic artichoke. My friend and I exchanged despairing glances. We were still picking at salad when the *criada* entered again, this time with steaming bowls of squash-blossom soup and a basket of yard-wide, paper-thin tortillas. *"Tácarim!"* I exclaimed. It was ten percent of my total vocabulary in *Cora.*

The general glanced at his wife and laughed uproariously. Finally she gave an unwilling grin. "Take that thing out to the pigs where it belongs," he said. The *criada* removed the centerpiece.

I attacked squash-blossom soup with the largest spoon, simultaneously ripping off a square foot of tortilla. Abruptly, the general and his wife were just people. Rather nice people, it seemed to me. Could he really be a pot farmer? Sadly, I supposed he could. It was a quick cash-crop and this country had no sociological problems, since it was not an *in* thing for their young people.

"I suppose most pot farmers would be willing to quit if the Americans would stop making pills," I hazarded.

"Posiblemente," the general said noncommittally. "I've never had enough of an in to consider planting it."

"Really?" My friend sounded less than totally convinced. "What was that infestation you had to burn out last year?"

"Nobody believes an Indian," the general complained.

My mad friend said something in *Cora*. The only words I caught were "horse" and "manure".

The general stared fixedly at my friend, and for a moment I thought things were going to turn unpleasant. Then with an air of sudden decision the fat man said, "*Malintzín*, I think you should know what really happened."

"My government pays me a salary based on that assumption," my friend said.

"The only trouble nowadays," the general began, "is nobody listens to Indians except anthropologists and mostly they have weak stomachs."

"Surest way to turn one off," I said, "is to suggest there might be a grain of fact in all those legends he's so busy tape recording."

"Oddly enough, it started with a legend," the general said. Wives suddenly interrupted their debate over boots and hemlines.

Turning to my mad friend, the general said, "You troubled to learn our language. Do you know the story of Earth Shaker?"

My friend frowned and shook his head.

"It's logical, this being earthquake country," I said. "Poseidon was important where the Greeks had similar geological difficulties."

"That's what I thought," the general said. "Of course, I never got to know the Old Men well, working here at the *casa grande* all the time. But I remember nights when the moon was in a certain phase we used to sneak off to sit around a fire and do things with drums to keep Earth Shaker quiet. Each Sunday the owners of the big house lined us up for confession, and the priest used to give us hell but then—priests give Indians hell just for breathing."

My mad friend mumbled something in Latin and made a gesture of exorcism.

"After two revolutions I drifted from Indian ways," the general continued. "I don't suppose I thought of Earth Shaker again until a couple of years ago."

"Not the sort of topic that's cropping up all the time," a wife agreed.

"I had just cleared this land and gotten it producing. I needed that first crop."

"Of tomatoes?" my friend asked.

"As you probably know," the general continued, "a tomato has no patience. Pick it a day late and you might as well not waste money shipping it."

"You had a sudden plague of labor troubles?" I asked.

"Overnight my pickers all disappeared."

"Which neighbor needed your

newly cleared land?" my friend asked.

"I did some detective work."

"You?"

The general smiled. "People see what they expect to see," he said. "In white *calzones* and shirt, with a feather in my hatband, I am not a landowner. Just another Indian looking for a job."

My friend reviewed the list of landowners in the delta. "The tracking station bought out Herrera. Johnson lies north of you—"

"You are having difficulties with a satellite?" the general asked.

I'd forgotten about making a big thing of our bogie over the phone. "Not really," I said. "Things like this happen all the time. Something goes wrong with the equipment and you get a false signal. Right now we've got something sitting directly overhead. If it was really there, you could see it with the naked eye. At that altitude it'd probably look bigger than the moon."

"I have seen nothing," the general said.

"Of course not," I explained. "Our radar sees it but telescopes and all sorts of other things don't see it. Therefore, it's not there. It takes time and patience to find out what's wrong with the radar."

My friend continued with the list of landowners. "Johnson lies north of you. The town is west and Henriquez lies south."

"Aha!" I said. "Is that the same Henriquez all those posters and painted rocks call an unpunished murderer?"

The general smiled sadly. "That chapter of politics is finished, I sincerely hope. Anyhow, this Henriquez is American. His real name is Hendryx."

"So which one was stealing your help?" a wife asked.

The *criada* came in again bearing a tremendous clay pot of refried beans. The general and his wife took theirs with handfuls of dried *chiltepines*, tiny holly-like berries only slightly warmer than solar plasma. I nibbled on relatively temperate *jalapeños*.

"No one was stealing my help," the general resumed.

"Were they losing theirs too?"

"It took me several days to make sure they were not. Then one night the moon was right and I found myself walking down a delta path with a band of men. At first I didn't realize where we were going, but suddenly in the firelight, listening to the peculiar sharp tone of war drums, I was twelve years old again."

"Why were they worried about Earth Shaker?" my friend asked. "I don't remember any bad quakes recently."

"I didn't know who or what Earth Shaker was. Like you, I'd always assumed he was a local Poseidon. But as I listened to the

chants and prayers, my ideas were revised."

"He's not an earthquake god?" a wife asked.

"I asked as many questions as I dared without arousing suspicion."

"Suspicion of being *yori*?" my friend asked.

"Of being *tocoyori*," the general corrected. "A white man is not responsible for his color, but everyone despises a turncoat."

"What did you finally learn?"

"Nothing."

"An Indian has difficulty extracting information from Indians?" My friend was incredulous.

"They weren't deliberately concealing anything," the general said. "But their data were so illogical."

"I have the same trouble with transubstantiation," I said.

"We must take some things on faith," my friend said.

"Even something underground that eats people?" the general asked.

"Earthquakes have been known to devour people," my friend said.

"Bears live in caves," a wife suggested.

"From what I could learn he was more like a snake."

"There are no man-eating-snakes this side of Brazil," I said.

"Not even in legend?" the general asked.

I surrendered. "Every archetypal horror the id can conceive is present somewhere in legend."

"Serves you right for not going to confession," my friend said.

"But we go," the general protested. "Now that we are free and no longer forced to go, my people still conform to the Christian faith—at least as they understand it."

"Give me the child until he is seven," my friend quoted.

"Give me Earth Shaker," I said.

"Coming home that night, I got a hint of what he might be," the general said. "My companions dropped off one by one, heading for their homes on neighboring ranches. By dawn I was alone. Unfortunately, I was on the wrong side of my ranch and there was no telephone. I resigned myself to more walking. And with my weight . . ."

The general sighed and stopped talking when the *criada* came back with coffee and *habanero*. My friend took coffee while the rest of us sipped the sherry and rum concoction.

"I had barely started walking again," he said, "when I sighted a burro eating my tomatoes. I drew my pistol. Then I realized the trouble I'd have dragging him out of the field. Also, if I could catch him, maybe I could ride home."

"Without a rope?" a wife asked.

"Indians have ways of catching animals," the general said. "Walking downwind, I was almost

within grabbing distance when some accursed crow saw me and gave the alarm. The burro trotted through a couple of rows, strewing ripe tomatoes behind him. Once again I began my stalk, hoping the crow would have more important business elsewhere. The plants were staked high and I couldn't see the burro. But I could hear him. Suddenly there was a threshing as he tore more plants loose."

"Rather an expensive ride," my friend hazarded.

The general nodded. "I drew my pistol again to shoot the beast before he could do more damage. But when I worked my way through the tomato plants, he had disappeared."

"The end of a perfect day," a wife said.

The general soberly agreed. "I was more interested in a bath and breakfast," he said. "Finally I attracted my *caporal's* attention with a couple of shots, and he brought me home in a jeep. I told him to go back and catch or shoot the burro."

"For this story to make sense, he didn't find it," my friend said.

"I was finishing breakfast when the field telephone rang. My *caporal* was a mestizo. Otherwise, I suppose he'd have disappeared with the rest of my help. 'My general,' he said, 'there is here something which does not explain itself.' A half hour later I was back looking over the damage that miserable beast had done."

"What was inexplicable?" a wife prompted.

"Tracks," the general said. "In soft, freshly cultivated ground even a *yori*—" He shot my friend an apologetic glance.

"They disappeared?" I asked.

"Either the burro grew wings, or an eagle carried him off."

"Shades of the Wéndigo!" I muttered.

"You didn't think of Earth Shaker?" my friend asked.

"The ground was smooth, tomato plants only slightly disturbed by the burro's passage."

"What did your *caporal* say?"

"Nothing. From the amount of white in his eye, I suspected I was about to lose another employee. Finally we drove stakes around the spot where the tracks disappeared. I spent the rest of the day in town going from one *cantina* to the next trying to recruit labor. It was not one of my better days. Exhausted, disgusted, resigned to losing my crop, I went to bed at nightfall."

"Where you slept rather unsoundly," my friend supplied.

"Before dawn I was up again. I remembered a trick we used to pull on the *federales*. I saddled a horse and roped a yearling calf. By the time he had struggled halfway across that field, the calf had learned to choose between leading and choking."

"Which choice he possibly later had cause to regret," my friend said.

"I tried to drive the yearling into the enclosure. When he refused I paid out rope until my horse was on the other side and began to drag him across."

"Which wasn't the smartest thing you'd ever done," my mad friend concluded.

"It cost me a calf, a horse, and would have cost my life if the horse hadn't bucked me clear."

"What did you see?" a wife asked.

"Mostly dust. Vaguely through the dust I thought I saw something else. That evening I went to confession for the first time in thirty years."

"Good for the soul," my friend approved.

"Nobody believes an Indian," the general protested. "Not even a priest."

"What did he say?" I asked.

"Chewed me out for blasting pot," the general said indignantly. "And I haven't touched the stuff since I came up in the world and tasted Scotch."

"So what did you do then?"

"What does an Indian do?" the general growled. "Have you ever faced the slab-jawed officials of another race who automatically assume you're drunk, stupid, or lying?"

My friend sighed. "I grew up," he said, "in a small Catholic country which was dominated by a powerful Protestant neighbor."

The general studied my friend closely. "You don't look Mexican," he said.

"It's nice of you to notice the parallel," my friend said. "But I'm Irish."

"What happened next?" a wife insisted.

"Subject races learn subterfuge," the general said.

"Please don't throw me in the brier patch!" my friend murmured.

"For one mad moment I thought of going to the government. But they are also mostly *yorim.*"

I began to see light. "You're not a pot farmer!" I exclaimed. "You never have been."

"Did I say I was?" the general asked aggrievedly.

Habanero finished, I accepted a cup of tarry, char-roasted coffee. The general offered cigars. I recognized the distinctly non-Cuban odor of West Coast tobacco. *"Compostela?"* I asked.

The general nodded.

My friend sniffed approvingly and lit up. "Couldn't have been a very big snake if burning over a field killed it," he said.

"I don't think it was a snake at all," the general said. "But I didn't depend on burning."

"How did you do it?" a wife asked.

"A burro, a packsaddle, a hun-

dred kg of 40 percent blasting-gelatin, and a slow fuse."

My friend blanched.

"Did you kill it?" I asked.

The general pointed at the cone-shaped rock I'd noticed as we entered. I got up to examine it. It was rough, like volcanic stone from the lava beds south of here. "Lapillus?" I asked.

The general shook his head. "Tooth," he said.

"Impossible!" my friend exclaimed. "That thing has no roots. Besides, it's two feet long!"

I was inclined to agree, when some warning bell rang in a frontal lobe. Where had I seen a similar tooth? Slowly, a slide from Biology I came into focus. "This mouth," I guessed, "was it triangular?"

The general's eyes widened. "Teeth in all three jaws," he said. I felt a prickle.

"There ain't no such animal!" my friend protested.

"No blood?" I hazarded.

"Slime."

"Where'd you ever see such a thing?" my friend sneered.

"In my garden. Slugs and snails have no jawbones, so their teeth need no roots."

Several wives put down their cups simultaneously.

The general stood. He paced moodily across the immense *sala* to peer out of a mullioned window. I couldn't imagine what he was seeing in the dark.

"Why the burning?" my friend said suddenly.

"Window dressing. Exorcism. Call it what you will."

"But why?"

"To get my help back, of course."

"Who told the government you were growing pot?"

"My *caporal*."

"And you still hire him?"

"I sent him. Even gave him a map."

Suddenly I realized that this Indian knew how to get something out of an uncooperative government. "Too bad you couldn't make them furnish the dynamite too," I said.

"They did," the general said moodily. "I stole it where they were building a highway." He turned in sudden resolve. "I suppose you're wondering why I've invited you all here tonight."

I glanced at friend and wives. Suddenly we were all laughing. "I'm sorry," I finally managed. "You don't look a bit like Boris Karloff."

Then abruptly my friend frowned. "I know," he said.

"Could you go over that slowly?" I asked.

"The burros in the enclosure," my friend said thoughtfully. "Did you notice the general counting them?"

Sweat sprayed as a I remembered him walking across that enclosure, poking about, pulling

weeds. No wonder the general had walked like he was in a mine field. "None missing?" I said hopefully.

"One."

I sat down.

"What do you want?" my friend asked.

"Nobody believes an Indian," the general said.

A phone rang. Ladies jumped. Gentlemen tried not to. The *criada* came into the room and whispered to the general. "For you," he said, pointing at me.

I went into the other room. "Good thing you told me where you were going to be tonight," Shapiro said. "That damn bogie's down to a hundred thousand."

"Impossible. It'd burn up in a holding orbit at that height."

"Tell it to the radar. It's still dropping."

I thought a moment. Something had to be wrong with the goddamn radar, but I'd been trying to find it for two weeks. "Better use the red phone," I finally said. "If it keeps coming down, somebody can fly by for a visual sighting."

"Right," Shapiro said.

I went back into the *sala*. "I'll do it," my friend was saying. He went the way I had come and I heard him struggling with the telephone. Finally he began talking in Spanish. The conversation warmed. "To me it imports phallus what you opine," he finally shouted. "Put me through to the colonel."

A moment's silence and then my friend said things in several languages. "All right," he finally shouted, "have it your own way: The general denied everything. By deep guile and sheer force of personality I tricked a confession out of him. Now will you drop a little napalm on that free-loving field?" A moment later my friend came into the *sala* still muttering in Arabic. It sounded like Nasser accepting an invitation to a B'nai B'rith dinner.

The general gave him a sad smile.

"Tomorrow morning," my friend said.

Suddenly there was a *feeling*. I didn't realize what it was until the *sala's* windows tinkled inward. An instant later the BOOM sent me skidding across the parquetry.

A wife who had not been in line with one of the windows helped me up. The yard-thick adobe walls had stood up admirably, but the roof was going to need a few hundred tiles.

While my mad friend had been wrangling over the telephone, the moon had risen. I saw a mushroom cloud rising from the glow that had been that field. "Isn't this carrying Operation Intercept a little far?" I asked.

"Are you out of your skull?" my mad friend asked. "I haven't authority to order this!"

"So who?" Then suddenly I knew. Was the telephone still working? It rang. The bruised and incredulous general answered and an instant later silently beckoned.

"Shapiro?" I asked.

"Yeah. I got on the red phone and somebody got on the hot line. Then somebody got on the chow mein line and a minute later somebody was on the blintz line."

"So who the hell authorized tactical A-weapons?"

"Nobody. Air Force sent a photo plane. By then the damn bogie was on the ground. Were you watching?"

"No. What happened?"

"I don't know for sure. There was only one TV pickup on the plane. Somewhere out of focus in one corner, it started glowing red, as if the whole goddamn airplane was melting. Then a second after that the plane started diving. It was just about zero range from that thing in the weed patch when the screen went blank."

"He kamikazed into foreign soil with A-weapons?"

"Of course not. He might've had a couple of Sidewinders. What d'you suppose he hit?"

Wives, general, mad friend were looking a me. "I've got an idea," I said. "Let's see if anybody believes an Indian."

Later, poking morosely through fallen tiles, my friend asked, "What's to believe? Man-eating slugs don't build spaceships."

I didn't think so either. "Maybe these ships drop in to harvest their cattle just as the general harvests his tomatoes."

My friend muttered something in Latin. "I can't believe it," he said. "A just God does not permit such things."

"Look what he permits on this planet."

My mad friend sighed. "You may have a point."

PLAYING THE GAME

by Isaac Asimov

MY OCCUPATION AS A WRITER ON FAR-OUT SUBJECTS MAKES IT inevitable that Gentle Readers send me all kinds of far-out letters, pamphlets and books. Their material is welcome, and I read everything sent me, up to the point where I judge it to be no longer worth reading. Sometimes this means I read the whole thing and profit, and sometimes I only read a few paragraphs.

It is not often, however, that I find my mental indicator veering over to "worthless" before I even start the book and indeed at the very first paragraph of the publisher's blurb. Exactly that happened recently.

I had received a book purporting (according to the covering letter) to reveal the truth about the origin of the Universe and to expose such fakers as Newton and Einstein. I must admit the letter itself left me without too much hope. However, fair's fair—I opened the book-cover and glanced at what was printed on the inner flap of the book-jacket.

It listed some of the startling points made by the author, and the very first was that the author "believes" that light which travels long distances is gradually absorbed; that the blue end of the spectrum is absorbed first; and that this accounts for the "red-shift" of the light from distant galaxies.

Now if this belief were true then all astronomical deductions based on the red-shift must be reevaluated, and there would be a chance that our most basic opinions concerning the Universe would be completely overturned. Surely I ought to find such beliefs exciting in the extreme and should therefore read on.

But no, for having read that much of the book-flap I put the book itself aside for disposal. What else could I do? Under certain conditions, light travelling long distances *is* absorbed or scattered, and blue light *is* absorbed or scattered first—but that has nothing to do with the red-shift. Since the author clearly didn't know what the red-shift was, what good were his beliefs on the subject?

What good are beliefs by themselves anyway? There is a view very popular among amateurs in science that it is only necessary to have a "theory" in order to revolutionize science. In actual fact, "theories" by themselves are nothing but intellectual amusement, and to become more than that they must be supported by observations; preferably by observations that not only support the theory but that quash opposing theories.

Science, like other intellectual games, has its rules—rules that have been strictly applied for nearly four centuries—and the results attained are ample evidence that the rules are good ones. Those who would revolutionize science had better learn the rules; not because that will make them respectable but because, believe me, they will never revolutionize science without them.

It is odd that, though no one who has never studied chess would dream he could beat a Grand Master, so many strict amateurs with little or no scientific training are convinced they can point out the "obvious" flaws in Einstein's theories.

Nor can amateurs console themselves (as they often do) with the thought that "they laughed at Galileo." Sure, some did, but *many didn't*. Galileo overthrew Aristotelian physics because, for one thing, he was a thorough student of that same Aristotelian physics. Similarly, Copernicus upset the Ptolemaic theory because, in part, he had a thorough education in Ptolemaic theory; and Vesalius cast out Galenic anatomy because, it must be understood, he was an expert on Galenic anatomy.

This is a general rule that must be understood by revolutionaires (perhaps in all fields, but certainly in science). You must thoroughly know that which you hope to supplant.

And now, as an example of how the game *is* played, let us go on to this matter of the red-shift and show just how that was worked out, how long it took, how many contributed, and how unlikely it is to be pounded into new shape by the vague speculations of the untutored.

The matter begins with a phenomenon that may have gone largely unnoticed until the coming of the railroad.

Suppose a whistle is emitting a sound of a given pitch. If the whistle is approaching you as it is sounding, the pitch it produces is higher than it would be if the whistle were motionless with respect to you. If, on the other hand, the whistle were moving away from you, the pitch would be lower than it would be if the whistle were motionless. What's more, the difference in pitch would be greater the more rapidly the whistle was moving toward you or away from you.

So far, I am just making flat statements. Are they true?

Well, before the 1830's nobody was likely to have wondered whether such statements were true or not. Probably nobody ever noticed any such pitch-changes.

Prior to the coming of the railroad the most rapid motion one was likely to encounter was that of a galloping horse. We might imagine a man on horseback blowing a sustained note on a horn. If the observer watched such a man ride past, the note would be higher than it would ordinarily be while he was approaching, lower than it would ordinarily be while he was departing. There would be a sudden drop when he was passing.

However, galloping horses with horn-blowing riders weren't all that common, and where such a situation did exist, the only explanation I can think of is that the horseman was probably leading a charge in battle. With hundreds of spear-wielding or saber-swinging cavalrymen galloping after him, no potential observer is going to be listening to the pitch of the horn.

But then came the locomotive, with its steamwhistle designed to perform the amiable work of warning men and beasts to get off the track! The locomotive passed periodically; its intentions were peaceful; observers watched and listened in fascination. They heard the steamwhistle switch from tenor to baritone as it passsed.

After that happened a number of times, curiosity was bound to be aroused. Why did it happen? Why did the whistle sound shriller when the train was approaching than when the train was standing at the station? Why did the whistle sound deeper when the train was departing? Why the sudden change just as it passed?

One could eliminate at once the thought that the engineer was playing tricks, since it happened with all trains and all engineers, and such elaborate trickery for no reason is utterly implausible. Besides, if two people were listening from different vantage points, the whistle was still shrill to those people it hadn't reached when it had already dropped in pitch to those people it had passed.

Enter an Austrian physicist, Christian Johann Doppler, who, in

1842, undertook to explain the phenomenon in terms of the nature of sound itself.

Sound, it was by then understood, was a wave phenomenon, producing its effect on the human ear through the existence of alternate regions of compression and rarefaction travelling across the medium through which it was transmitted. The distance from one region of compression to the next is called the "wavelength," and it could be shown that the shorter the wavelength, the higher the pitch, and the longer the wavelength, the lower the pitch.

It so happens that sound, at 0° C., travels at a velocity of close to 330 meters per second.* This means that each region of compression is moving outward from the sound-source, in all directions, at 330 meters per second.

Suppose, now, that a whistle is emitting a steady blast at a given pitch, one in which 330 waves of compression are produced each second—a pitch equivalent to E above middle C on the piano. One second after the note has begun sounding, 330 waves of compression have been formed. The first of these waves has had the opportunity to move outward 330 meters, and the rest are all strung out evenly behind it. You can see that this means there is exactly 1 meter distance between the successive compressions and that the wave length of the sound is just 1 meter.

But suppose the whistle is on a locomotive that is approaching you at 33 meters per second, which is one-tenth the speed of sound.

By the time the first wave of compression has travelled 1 meter from its starting point, the second wave of compression is ready to be emitted, and by that time the locomotive has travelled forward 0.1 meters. The second wave of compression starts out, therefore, only 0.9 meters behind its predecessor, and this same argument applies for every wave of compression that follows.

In other words, where a particular locomotive whistle emits sound with a wavelength of 1 meter when it is at rest with respect to you, it emits sound with a wavelength of 0.9 meters when it is approaching you at a speed of 33 meters per second. (And the wavelength would be shorter still if it were approaching still more rapidly.)

A wavelength of 0.9 meters is equivalent to a frequency of 330/0.9 or 367 per second, which is almost the equivalent of F-sharp.

** I am going to use "meters per second" as the unit of velocity throughout this article just to be devilish (and scientifically conventional). If you are more comfortable with "miles per hour," just keep in mind that 1 meter per second equals just about 2¼ miles per hour. Thus, 330 meters per second equals 752 miles per hour.*

Everything is just the reverse if the locomotive is moving away from you. Then, when the first wave of compression has travelled 1 meter toward you and the second wave is about to be emitted, the locomotive has travelled 0.1 meter away from you, and the wavelength is 1.1 meters. The frequency is 330/1.1 or 300 per second, which is just about equivalent to the note, D.

We can say, then, that a locomotive whose whistle naturally sounds E, sounds F sharp as it approaches at the usual speed of a moderately fast express and that the sound drops suddenly to D as it passes.

Notice that the pitch is related to the relative motion of locomotive and observer. That may seem surprising. After all, if the locomotive is approaching and is squeezing the compression waves closer together what has that to do with the person listening? Well, if you were moving in the same direction as the locomotive and at the same speed, the waves of compression which were pushed together as they emerge from the whistle would be stretched apart again as they race to overtake your ears. And if you and the train are moving at the same velocity, the stretching at the ear would exactly balance the compression at the whistle. You would hear the normal pitch exactly as though both you and whistle were motionless.

So far, though, Doppler's analysis (which was essentially the above) is pure ivory-tower theorizing. Still, it offers a possibility for observation. Doppler's theory related the speed of sound, the speed of the sound-source, and the pitch of the sound in a perfectly definite way, and it was only necessary to run an experiment that would allow the necessary measurements to be made in order to see if they were indeed in accord with the Doppler analysis.

To do that, Doppler managed to commandeer a flat car and a stretch of Dutch railway in 1844. On the flat car, he placed trumpeters with orders to sound this note or that and to hold it steady as they passed observers with a sense of absolute pitch. The observers reported the exact drop in pitch and from the speed of sound and of the flatcar Doppler did some calculating and found that the observed drop in pitch was equal to that predicted by his theory. This change of pitch with velocity has been called the "Doppler effect" ever since.

Doppler saw at once that his analysis could apply not to sound alone, but to any wave form at all. Light, for instance, consisted of tiny waves, and if a light-source emitting a single wavelength of light were approaching you, surely that wavelength should shorten and the frequency increase. If the source receded from you, the wavelength should lengthen and the frequency decrease.

Whereas sound alters in pitch as the wavelength changes, light alters in color. Visible light can have any of a range of wavelengths, the longest representing the color red, and then, with decreasing wavelength, orange, yellow, green, blue and violet (the spectrum, with the rainbow as a natural example).

Well, then, if a receding light-source emits a particular wavelength, that wavelength is longer than it would be if the light-source were stationary. Its color would shift in the direction of the red. If the light-source were approaching, its color would shift in the direction of the violet.

We can say, then, that a receding light-source is accompanied by a "red-shift" and an approaching light-source by a "violet-shift." Actually, my own feeling is that "red-shift" is a very poor term. It makes it sound as though the red light itself were shifting, or that light was shifting into the red. Neither is so. Since any light of any wavelength would shift *toward* the red in case the source is receding, we ought to call it a "redward-shift." The reverse would be a "violetward-shift," or if that is too ugly a phrase "blueward-shift" would do almost as well.*

But now that we've decided the Doppler effect ought to apply to light as well as to sound, using pure reason, how can we play the game of science and test the theory by observation?

Why not repeat the trick that worked for sound? A locomotive whistle demonstrates a marked and unmistakable drop in pitch when that whistle passes us at a tenth the velocity of sound. Ought not a locomotive headlight (emitting a particular wavelength of light) demonstrate an equally marked and unmistakable change in color when it passes us at a tenth the velocity of light?

The trouble is that light travels so much faster than sound. Light travels at very nearly 300,000,000 meters per second. A tenth of that velocity is 30,000,000 meters per second and, let's face it, no locomotive can go that fast.

Suppose, then, we make do with what we have and deal with a locomotive travelling at the usual 33 meters per second, as in the case of sound. Here, though, the change in velocity is from +33 meters per second (approaching) to −33 meters per second (receding) or 66 meters per second altogether. This is less than 1/4,000,000 the speed of light. The wavelength of light would shift by about this proportionate amount and detecting so tiny a shift would be difficult—prohibitively difficult in Doppler's time.

* *I just mention this as a personal piece of pedantry. I'm sure the phrase will stay "red-shift".*

Doppler could scarcely be expected, then, to demonstrate a Doppler effect in light by purely earth-bound experiments, despite his great success with respect to sound.

But what about the heavenly bodies? They moved much more rapidly than man-made objects did or could. The earth, for instance, rotates in 24 hours, which means that a spot on earth's equator is moving (relative to Earth's center) at a speed of about 465 meters per second, or 14 times the speed of an express train. The Moon revolves about the Earth at a speed of about 1000 meters per second. The Earth revolves about the Sun at a speed of about 30,000 meters per second, while Mercury at its closest approach to the Sun reaches a speed of 57,000 meters per second.

It seems reasonable to suppose that the velocities of heavenly bodies, relative to one another, are generally in the thousands and ten-thousands of meters per second, and this offers a little more hope. Earth moves, relative to the Sun, at a velocity equal to 1/10,000 the speed of light. Not much, but a lot better than 1/4,000,000.

So let's not worry about light-sources attached to locomotives and consider, instead, the light emitted by heavenly bodies.

Of course, if we were dealing with a locomotive, we could possibly work up a headlight that would deliver a single wavelength of light and that would be easy to follow as it shifted this way and that. If we deal with heavenly bodies, we must take the wavelengths we get, and we find that such bodies, whether they shine of their own light, as the stars do, or of reflected light as the planets do, deliver a broad band of wavelengths. That makes the matter of measuring a small shift much more complicated.

Doppler thought this added complication was not fatal. He assumed that a star delivered only visible light, spread across the spectrum from violet to red and that this spread was a more or less even one. If the star were receding from us, he imagined that all the wavelengths would grow longer and that the light would crowd into the red end of the spectrum, leaving the violet end empty. As a result, the overall light of the star would be distinctly redder in color. The greater the speed of recession, the more extreme the crowding into the red end, and the more distinctly red a star would become. On the other hand, if a star were approaching us, the light would crowd the other way and the star would become bluish in color.

Doppler was buoyed up in this belief by the fact that there were indeed stars which were redder than most (Antares, for instance, and Betelgeuse) and also stars which were bluer than most (Rigel, for

instance, and Vega). Doppler suspected that Antares and Betelgeuse were receding from us at brisk velocities and Rigel and Vega were approaching us, and that it was this that accounted for their colors.

Unfortunately, Doppler had started with a false assumption, and one which he ought to have known was false. (Well, let he among us who is without intellectual sin cast the first stone.) The fact is, a star doesn't radiate *only* visible light from violet to red. It also radiates in the infra-red, beyond the long-wavelength end of the visible spectrum, and in the ultra-violet, beyond the short-wavelength end. This was known since 1801.

When a star recedes from us, then, the light shifts redward without crowding up against an end-of-the-red barrier as Doppler had imagined. The very long-wave red shifts into the infra-red, and is replaced by the not-so-long-wave red, which is in turn replaced by the not-so-not-so-long-wave red, and so on. At the other end, the very short-wave violet which shifts toward the red does not leave an empty place at the short-wavelength end of the spectrum. It is replaced by the near ultraviolet which moves into the visible region. —Precisely the reverse happens when a star approaches.

In other words, infrared and ultraviolet provide a kind of cushion, and the visible portion of the spectrum does not change substantially with approach or recession of a star. The star's overall color does not change. What *does* affect the color is the star's temperature. A star hotter than our Sun is bluer in color (which is true of Rigel and Vega), while one that is cooler than our Sun is redder in color (as in the case of Antares and Betelgeuse).

(You see, then, that the author of the book I referred to in my introduction to this essay *still* had a Dopplerian notion of the redward-shift—a notion now nearly two centuries out of date. Why read any of the book then?)

In 1848, the French physicist, Armand Hippolyte Fizeau, pointed out Doppler's error. He explained that it was no use trying to observe color changes. What one had to do was pick out some particular wavelength in the spectrum and somehow mark it. Then that particular wavelength could be observed as it shifted.

How could a particular wavelength be marked? Actually, there was a way, and Fizeau pointed it out.

In 1814, a German optician, Joseph von Fraunhofer, discovered that the spectrum of Sunlight was crossed by hundreds of dark lines, each one in a fixed position.

It might well be that each line represented a particular wavelength

that was *absent* in Sunlight as it reached the Earth, and if so, that absent wavelength might shift and be followed in the spectrum produced by stars other than the Sun. (The dark lines in the Sun are unshifted because the Earth does not move toward the Sun or away from it, but at right angles to its position, and a right-angle motion produces no shift. Thus the lines in the Solar spectrum can be used as a reference against which to compare other spectra.*)

As a result of Fizeau's suggestion, the shift of wavelength with approach or recession of the light-source is properly called the "Doppler-Fizeau effect."

Of course, Fizeau's suggestion remained nothing more than that until some way could be found to observe and measure the Doppler-Fizeau effect. It wasn't easy. In 1848, it was very difficult to get a visible spectrum out of starlight, so that its dark lines might be studied. When astronomers managed to accomplish this task, it quickly turned out that the spectrum of one star was often widely different in basic appearance from that of another. This meant it was uncertain whether spectral lines in one star could reasonably be compared with those of another and that shifts could therefore be converted into velocities.

But then, in 1859, the German physicist, Gustav Robert Kirchhoff, showed that light produced by heated elements was emitted only in certain fixed wavelengths. Light passing through the vapors of a particular element was selectively absorbed, with only certain wavelengths being subtracted from the light. Each element emitted and absorbed the same particular wavelengths and no others. No one element emitted or absorbed wavelengths identical to those emitted or absorbed by any other element. Each element, then, possessed a "fingerprint" in the spectrum.

It seemed overwhelmingly probable that light produced at the Solar surface, passing through the somewhat cooler atmosphere of the Sun, lost certain wavelengths through absorption by that atmosphere. The dark lines in the Solar spectrum indicated, then, the chemical constitution of the Solar atmosphere.

The overall spectrum might vary from one star to another in accordance with changes in temperature and chemical constitution, but individual spectral lines would be constant. A hydrogen line was a hydrogen line, and an iron line was an iron line.

** Because the Earth's orbit is not exactly circular, the Earth does approach the Sun slightly for half a year and then recede from it the other half. The rate of approach or recession is something like 3 meters per second on the average—small enough to be ignored.*

Astronomers turned to a study of the spectral lines with confidence then, and in 1868 the English astronomer, William Huggins, observed the spectrum of Sirius and detected a slight redward-shift of a hydrogen line (as compared with the analogous line in the Sun's spectrum). He concluded that Sirius was receding from us at a speed of 40,000 meters per second. This figure was eventually corrected by more refined observations, but for a first try it was pretty good.

Such shifts, some redward and some blueward, were detected in other stars, and astronomers were very pleased. And yet there was a weakness in the logic; the rules of the game of science demanded more.

Observe! Fizeau had decided that as a light-source receded, the spectral lines *ought* to shift to the redward. Neither he nor anybody else had, at that time, actually observed such a shift take place in the case of a light-source known to be receding.

Huggins, on the other hand, had observed a redward shift in the spectrum of Sirius and had decided that the star *ought* to be receding. This second "ought," however, depends entirely on the first "ought," and until the first "ought" is demonstrated, the second means nothing.

The game of science, if we are to play it rigorously, requires that we find some light-source that we know is moving away from us, making use of firm evidence *other* than the redward-shift. Then if that light-source also shows a redward-shift, we are in business.

With that in mind, let's consider the Sun. I have said earlier that it neither approaches us nor recedes from us, on the whole—but it does rotate on its axis. From a study of the motion of Sunspots, it becomes quite clear that the Sun makes a complete rotation in 25 days and 1 hour (at its equator). The evidence is utterly convincing, depends on direct observation, and no one disputes it. The Sun's circumference is 4,400,000,000 meters, so any point on its equator must travel that distance in 25 days and 1 hour and must therefore move at a speed of 2000 meters per second.

This means that at one edge of the Sun's disk, the equatorial surface is approaching us at a speed of 2,000 meters per second, while at the other edge it is moving away from us at 2,000 meters per second.

From 1887 to 1889, the Swedish astronomer, Nils Christofer Duner, studied the spectrum of light coming exclusively from one edge of the Solar disc and then exclusively from the other side. He did indeed find a measurable blueward-shift in one case and a redward-shift in the other. What's more, the shift was just the amount one would expect from a velocity (relative to ourselves) which had been determined by an utterly different and quite reliable method.

This established the Doppler-Fizeau shift, and for an entire generation, astronomers were entirely happy with it, especially since the picture of the heavens which it helped draw made a lot of sense and introduced no unsettling matters.

But, you know, they still weren't playing the game with the proper rigor. Even if we must agree that a velocity of recession causes a redward-shift, we still have to ask ourselves if anything else can *also* cause a redward-shift. If there is more than one cause for a redward-shift, then how can we be sure which cause is operative in a particular redward-shift?

The game of science never allows permanent immunity for those who break the rules, and in the 1910's, the matter of redward-shifts turned up something so surprising as to reopen the whole question.

I'll get into that next month.

This novelet by the author of DUNE, THE SANTAROGA BARRIER, *among others, opens with the same prologue as Poul Anderson's "The Fatal Fulfillment" (March 1970), a brief scene dealing with the curious fate of one Douglas Bailey. It then goes off in a totally different, but no less engrossing direction, toward a strange, symbiotic alien that depends for survival on its human host committing murder.*

MURDER WILL IN

by Frank Herbert

PROLOGUE

"Left hand," the thin man said tonelessly. "Wrist up."

Douglas Bailey peeled back his cuff; the thin man put something cold against it, nodded toward the nearest door.

"Through there, first slab on the right," he said, and turned away.

"Just a minute," Bailey started. "I wanted—"

"Let's get going buddy," the thin man said. "That stuff is fast."

Bailey felt something stab up under his heart. "You mean—you've already . . . that's all there is to it?"

"That's what you came for, right? Slab one, friend. Let's go."

"But—I haven't been here two minutes—"

"Whatta you expect—organ music? Look, pal," the thin man shot a glance at the wall clock. "I'm on my break, know what I mean?"

"I thought I'd at least have time for . . . for . . ."

"Have a heart, chum. You make it under your own power. I don't have to haul you, see?" The thin man was pushing open the door, urging Bailey through into an odor of chemicals and unlive flesh. In a narrow, curtained al-

cove, he indicated a padded cot.

"On your back, arms and legs straight out."

Bailey assumed the position, tensed as the thin man began fitting straps over his ankles.

"Relax. It's just if we get a little behind and I don't get back to a client for maybe a couple hours and they stiffen up . . . well, them issue boxes is just the one size, you know what I mean?"

A wave of softness, warmness swept over Bailey as he lay back.

"Hey, you didn't eat nothing the last twelve hours?" The thin man's face was a hazy pink blur.

"I awrrr," Bailey heard himself say.

"OK, sleep tight, paisan . . ." The thin man's voice boomed and faded. Bailey's last thought as the endless blackness closed in was of the words cut in the granite over the portal to the Euthanasia Center:

". . . send me your tired, your poor, your hopeless, yearning to be free. To them I raise the lamp beside the brazen door . . ."

As the body died, the Tegas/Bacit awoke. Unconsciousness had lasted its usual flickering instant for the Tegas element. He came out of it with his Bacit negative identity chanting: ". . . not Douglas Bailey—I'm not Douglas Bailey—I'm not Douglas Bailey . . ."

It was a painful, monotonous refrain—schismatic, important. The Tegas had to separate its identity from this fading flesh. Behind the chant lay a sense of many voices clamoring.

Awareness began to divide, a splitting seam that separated him from the compressed contact which controlled the host. There came a sensation of tearing fabric, and he rode free, still immersed in the dying neural system because he had no other place to go, but capable of the identity leap.

Bacit and Tegas now functioning together, sticking him to each instant. He searched his surroundings: twenty meters . . . twenty . . .

Flickering, pale emotions registered on his awareness. Another attendant. The man passed out of range. Cold-cold-cold.

Nothing else.

What a rare joke this was, he thought. What a mischievous thing for fate to do. A Tegas to be caught like this! Mischievous. Mischievous. It wasn't fair. Hadn't he always treated the captive flesh with gentle care? Hadn't he made fun-lovers out of killers? Fate's mischief was cruel, not kindly in the manner of the Tegas.

The Bacit negative identity projected terror, accusation, embarrassment. He had lived too long in the Douglas Bailey flesh. Too long. He had lived down

where men were, where things were made—in the thick of being. He'd loved the flesh too much. He should've stopped occasionally and looked around him. The great Tegas curiosity which masqueraded as diffidence to hide itself had failed to protect him.

Failed . . . failed . . .

Within the dying neural system, frantic messages began darting back and forth. His mind was a torrent, a flare of being. Thoughts flew off like sparks from a grinding wheel.

"It's decided," the Tegas transmitted, seeking to quiet his negative self. The communicative contact returned a sharp feeling of shame and loss.

The Bacit shifted from terror to fifth-order displeasure, which was almost as bad as the terror. All the lost experiences. Lost . . . lost . . . lost . . .

"I had no idea the Euthanasia Center would be that simple and swift," the Tegas transmitted. "The incident is past changing. What can we do?"

He thought of the one vid-call he'd permitted himself to check on the Center's hours and routine. A gray-haired, polished contact-with-the-public type had appeared on the screen.

"We're fast, clean, neat, efficient, sanitary, and reverent," the man had said.

"Fast?"

"Who would want a slow death?"

The Tegas wished in this instant for nothing more than a slow death. If only he'd checked further. He'd expected this place to be seething with emotions. But it was emotionally dead—silent as a tomb. The joke-thought fell on inner silence.

The Bacit transfixed their composite self with a projection of urgent measurement—the twenty meters limit across which the Tegas could launch them into a new host.

But there'd been no way of knowing this place was an emotional vacuum until the Tegas element had entered here, probed the place. And these chambers where he now found himself were much farther from the street than twenty meters.

Momentarily, the Tegas was submerged in accusatory terror. *This death isn't like murder at all!*

Yet, he'd thought it would be *like* murder. And it was murder that'd been the saving device of the Tegas/Bacit for centuries. A murderer could be depended upon for total emotional involvement. A murderer could be lured close . . . close . . . close, much closer than twenty meters. It'd been so easy to goad the human creatures into that violent act, to set up the ideal circumstances for the identity leap. The Tegas abso-

lutely required profound emotions in a prospective host. One couldn't focus on the neural totality without it. Bits of the creature's awareness center tended to escape. That could be fatal—as fatal as the trap in which he now found himself.

Murder.

The swift outflow of life from the discarded host, the emotional concentration of the new host—and before he knew it, the murderer was captive of the Tegas, captive in his own body. The captive awareness cried out silently, darting inward with ever-tightening frenzy until it was swallowed.

And the Tegas could get on about its business of enjoying life.

This world had changed, though, in the past hundred years of the Douglas Bailey period. Murder had been virtually eliminated by the new predictive techniques and computers of the Data Center. The android law-niks were everywhere, anticipating violence, preventing it. This was an elliptical development of society, and the Tegas realized he should've taken it into account long ago. But life tended to be so pleasant when it held the illusion of never ending. For the Tegas, migrating across the universe with its hosts, moving as a predator in the dark of life, the illusion could be a fact.

Unless it ended here.

It didn't help matters that decisions had been forced upon him. Despite a fairly youthful appearance, the host flesh of Douglas Bailey had been failing. The Tegas could keep its host going far beyond the normal span, but when the creature began to fail, collapse could be massive and abrupt.

I should've tried to attack someone in circumstances where I'd have been killed, he thought. But he'd seen the flaw there. The emotionless law-niks would have been on him almost instantly. Death might've escaped him. He could've been trapped in a crippled, dying host surrounded by android blankness or, even worse, surrounded by humans rendered almost emotionless by that damnable "Middle Way" and "Eightfold Karma."

And the hounds were on his trail. He knew they were. He'd seen plenty of evidence, sensed the snoopers. He'd lived too long as Douglas Bailey. The ones who thrived on suspicion had become suspicious. And they couldn't be allowed to examine a Tegas host too closely. He knew what'd put them on his trail: that diabolical "total profile of motives". The Tegas in Douglas Bailey was technically a murderer thousands of times over. Not that he went on killing and killing; once in a human lifetime was enough. Murder could take the fun out of life.

Thoughts were useless now, he realized. He had, after all, been trapped. Thinking about it led only to Bacit accusations. And while he jumped from thought to thought, the Douglas Bailey body moved nearer and nearer to dissolution. The body now held only the faintest contact with life, and that only because of desperate Tegas efforts. A human medic would've declared Bailey dead. Breathing had stopped. Abruptly, the heart fibrillated, ceased function.

Less than five minutes remained for the Tegas. He had to find a new host in five minutes or die with this one.

"Murder-murder-murder," the Bacit intruded. "You said euthanasia would be murder."

The Tegas felt Douglas Bailey-shame. He cursed inwardly. The Bacit, normally such a useful function for a Tegas (driving away intellectual loneliness, providing companionship and caution) had become a distracting liability. The intrusion of terrifying urgency stopped thought.

Why couldn't the Bacit be silent and let him think?

Momentarily, the Tegas realized he'd never before considered the premises of his own actions.

What was the Bacit?

He'd never hungered after his own kind, for he had the Bacit. But what, after all, was the Bacit? Why, for example, would it let him captivate only males? Female thinking might be a help in this emergency. Why couldn't he mix the sexes?

The Bacit used the inner shout: "Now we have time for philosophy?"

It was too much.

"Silence!" the Tegas commanded.

An immediate sense of loneliness rocked him. He defied it, probed his surroundings. Any host would do in this situation—even a lower animal, although he hadn't risked one of those in eons. Surely there must be some emotional upset in this terrible place . . . something . . . anything . . .

He remembered a long-ago incident when he'd allowed himself to be slain by a type who'd turned out to be completely emotionless. He'd barely managed to shift in time to an eyewitness of the crime. The moment had been like this one in its sudden emergency, but who was eyewitness to this killing? Where was an alternate host? He searched fruitlessly.

Synapses began snapping in the Douglas Bailey neural system. The Tegas withdrew to the longest-lived centers, probed with increasing frenzy.

A seething emotional mass lifted itself on his awareness horizon. Fear, self-pity, revenge, anger: a lovely prospect, like a rescue steamer bearing down on a drowning mariner.

"I'm not Douglas Bailey," he reminded himself and launched outward, homing on that boiling tangle of paradox, that emotional beacon . . .

There came the usual bouncing shock as he grabbed for the new host's identity centers. He poured out through a sensorium, discovered his own movements, felt something cold against a wrist. It was not yet completely his wrist, but the eyes were sufficiently under control for him to force them toward the source of sensation.

A flat, gray metallic object swam into focus. It was pressed against *his* wrist. Simultaneously, there occurred a swarming sense of awareness within the host. It was a sighing-out—not submission, but negative exaltation. The Tegas felt an old heart begin to falter, looked at an attendant: unfamiliar face—owlish features around a sharp nose.

But no emotional intensity, no central hook of being to be grabbed and captivated.

The room was a twin to the one in which he'd been captured by this system. The ceiling's time read-out said only eight minutes had passed since that other wrist had been touched by death.

"If you'll be so kind as to go through the door behind you," the owl-faced attendant said. "I do hope you can make it. Had to drag three of you in there already this shift; I'm rather weary."

Weary? Yes—the attendant radiated only emotional weariness. It was nothing a Tegas could grasp.

The new host responded to the idea of urgency, pushed up out of a chair, shambled toward an oval door. The attendant hurried him along with an arm across the old shoulders.

The Tegas moved within the host, consolidated neural capacity, swept in an unresisting awareness. It wasn't an awareness he'd have taken out of choice—defeated, submissive. There was something strange about it. The Tegas detected a foreign object pressed against the host's spine. A capsule of some kind—neural transmitter/receiver. It radiated an emotional-damper effect, commands of obedience.

The Tegas blocked it off swiftly, terrified by the implications of such an instrument.

He had the host's identity now: James Daggett; that was the name. Age seventy-one. The body was a poor, used-up relic, weaker and more debilitated than Douglas Bailey had been at two hundred and thirty-six. The host's bird-like awareness, giving itself up to the Tegas as it gave up to death, radiated oddly mystical thoughts, confusions, assumptions, filterings.

The Tegas was an angel "come to escort me."

Still trailing wisps of Douglas Bailey, the Tegas avoided too

close a linkage with this new host. The name and self-recognition centers were enough.

He realized with a twisted sense of defeat that the old body was being strapped onto a hard surface. The ceiling loomed over him a featureless gray. Dulled nostrils sniffed at an antiseptic breeze.

"Sleep well, paisano," the attendant said.

Not again! the Tegas thought.

His Bacit-half reasserted itself: "We can jump from body to body—dying a little each time. What fun!"

The Tegas transmitted a remote obscenity from another world and another con, describing what the Bacit-half could do with its bitterness.

Vacuity replaced the intrusion.

Defeat . . . defeat . . .

Part of this doomed mood, he realized, came out of the James Daggett personality. The Tegas took the moment to probe the host's memories, found the time when the transmitter had been attached to his spine.

Defeat-obedience-defeat . . .

It stemmed from that surgical instant.

He restored the blocks, quested outward for a new host. Questing, he searched his Tegas memory. There must be a clue somewhere, a hint, a thought—some way of escape. He missed the Bacit contribution; parts of his memory felt cut off. The neural linkage with the dying James Daggett clung like dirty mud to his thoughts.

Ancient, dying James Daggett remained filled with mystical confusions until he was swallowed by the Tegas. It was a poor neural connection. The host was supposed to resist. That strengthened the Tegas' grip. Instead, the Tegas ran into softly dying walls of other-memory. Linkages slipped. He felt his awareness range contracting.

Something swam into the questing field—anger, outrage of the kind frequently directed against stupidities. The Tegas waited, wondering if this could be another *client* of the Center.

Now, trailing the angry one came another identity. Fear dominated this one. The Tegas went into a mental crouch, focused its awareness hungrily. An object of anger, a fearful one—there was one a Tegas could grab.

Voices came to him from the hallway outside the alcove—rasping, attacking and (delayed) fearful.

James Daggett's old and misused ears cut off overtones, reduced volume. There wasn't time to strengthen the host's hearing circuits, but the Tegas grasped the sense of the argument.

". . . told to notify . . . immediately if . . . Bailey! Douglas Bailey! . . . saw the . . . your desk . . ."

And the fearful one: ". . . busy . . . you've no idea how . . . and understaffed and . . . ten an hour . . . only . . . this shift . . ."

The voices receded, but the emotional auras remained within the Tegas' range.

"Dead!" It was the angry one, a voice-blast accompanied by a neural overload that rolled across the Tegas like a giant wave.

At the instant of rage, the fearful one hit a momentary fear-peak: abject retreat.

The Tegas pounced, quitting James Daggett in the blink-out as life went under. It was like stepping off a sinking boat into a storm-wracked cockleshell. He was momentarily lost in the tracery of material space-time which was the chosen host. Abruptly, he realized the fearful one had husbanded a reserve of supercilious hate, an ego-corner fortified by resentments against authority accumulated over many years. The bouncing shock of the contact was accompanied by an escape of the host's awareness into the fortified corner.

The Tegas knew then he was in for a fight such as he'd never before experienced. The realization was accompanied by a blurred glimpse through host-eyes of a darkly suspicious face staring at him across a strapped-down body. The death-locked features of the body shook him—Douglas Bailey! He almost lost the battle right there.

The host took control of the cheeks, contorted them. The eyes behaved independently: one looking up, the other down. He experienced direct perception, seeing with the fingertips (pale glowing), hearing with the lips (an itch of sound). Skin trembled and flushed. He staggered, heard a voice shout: "Who're you? What you doing to me?"

It was the host's voice, and the Tegas, snatching at the vocal centers, could only burr the edges of sound, not blank out intelligibility. He glimpsed the dark face across from him in an eye-swirling flash. The other had recoiled, staring.

It was one of the suspicious ones, the hated ones, the ones-who-rule. No time to worry about that now. The Tegas was fighting for survival. He summoned every trick he'd ever learned—cajolery, mystical subterfuges, a flailing of religious illusion, love, hate, wordplay. Men were an instrument of language and could be snared by it. He went in snake-striking dashes along the neural channels.

The name! He had to get the name!

"Carmy . . . Carmichael!"

He had half the name then, a toehold on survival. Silently, roaring inward along synaptic channels, he screamed the name—

"I'm Carmichael! I'm Carmichael!"

"No!"

"Yes! I'm Carmichael!"

"You're not! You're not!"

"I'm Carmichael!"

The host was bludgeoned into puzzlement: "Who're you? You can't be me. I'm . . . Joe—Joe Carmichael!"

The Tegas exulted, snapping up the whole name: "I'm Joe Carmichael!" He surged along new circuits, consolidated gains. "I'm Joe Carmichael!"

The host's awareness spiraled inward, darting, frenzied. Eyes rolled. Legs trembled. Arms moved with a disjointed flapping. Teeth gnashed. Tears rolled down the cheeks.

The Tegas smashed at him now: "I'm Joe Carmichael!"

"No . . . no . . . no . . ." It was a fading inner scream, winking out . . . back . . . out. . . .

Silence.

"I'm Joe Carmichael," the Tegas thought.

It was a Joe Carmichael thought faintly touched by Tegas' inflections and Bacit's reproving: "That was too close."

The Tegas realized he lay flat on his back on the floor. He looked up into dark features identified by host-memories: "Chadrick Vicentelli, Commissioner of Crime Prevention."

"Mr. Carmichael," Vicentelli said. "I've summoned help. Rest quietly. Don't try to move just yet."

What a harsh, unmoving face, the Tegas thought. Vicentelli's face was a Noh mask. And the voice: wary, cold, suspicious. This violent incident wasn't on any computer's predictives . . . or was it? No matter—a suspicious man had seen too much. Something had to be done—immediately. Feet already could be heard pounding along the corridor.

"Don't know what's wrong with me," the Tegas said, managing the Carmichael voice with memory help from the Bailey period. "Dizzy . . . whole world seemed to go red . . ."

"You look alert enough now," Vicentelli said.

There was no *give* in that voice, no love. Violence there, suspicious hate contained in sharp edges.

"You look alert enough now."

A Tegas shudder went through the Carmichael body. He studied the probing, suspicious eyes. This was the breed the Tegas avoided. Rulers possessed terrible resources for the inner battle. That was one of the reasons they ruled. The Tegas had been swallowed by rulers—dissolved, lost. Mistakes had been made in the dim beginnings before the Tegas learned to avoid ones such as this. Even on this world, the Tegas recalled early fights, near things that had resulted in rumors and customs,

myths, racial fears. All primitives knew the code: *"Never reveal your true name!"*

And here was a ruler who had seen too much in times when that carried supreme danger. Suspicion was aroused. A sharp intelligence weighed data it should never have received.

Two red-coated android law-niks, as alike in their bland-featured intensity as obedient dogs, swept through the alcove hangings, came to a stop and waited for Vicentelli's orders. It was unnerving: even with androids, the ones-who-submitted never hesitated in looking first to a ruler for their orders.

The Tegas thought of the control capsule that had been on James Daggett's spine. A new fear trembled through him. The host's mouth was dry with a purely Carmichael emotion.

"This is Joseph Carmichael," Vicentelli said, pointing. "I want him taken to IC for a complete examination and motivational profile. I'll meet you there. Notify the appropriate cadres."

The law-niks helped the Tegas to his new feet.

IC—Investigation Central, he thought.

"Why're you taking me to IC?" he demanded. "I should go to a hospital for. . ."

"We've medical facilities," Vicentelli said. He made it sound ominous.

Medical facilities for what?

"But why . . ."

"Be quiet and obey," Vicentelli said. He glanced at Douglas Bailey's body, back to Carmichael. It was a look full of weighted suspicions, half-knowledge, educated assumptions.

The Tegas glanced at Douglas Bailey's body, was caught by an inward-memory touch that wrenched at his new awareness. It had been a superior host, flesh deserving of love. The nostalgia passed. He looked back at Vicentelli, formed a vacant stare of confusion. It was not a completely feigned reaction. The Carmichael takeover had occurred in the presence of the suspected Douglas Bailey—no matter that Douglas Bailey was a corpse; that merely fed the suspicions. Vicentelli, assuming an unknown presence in Douglas Bailey, would think it had leaped from the corpse to Carmichael.

"We're interested in you," Vicentelli said. "Very interested. Much more interested than we were before your recent . . . ahhh, seizure." He nodded to the androids.

Seizure! the Tegas thought.

Firm, insistent hands propelled him through the alcove curtains into the hallway, down the hall, through the antiseptic white of the employees' dressing room and out the back door.

The day he'd left such a short

time before as Douglas Bailey appeared oddly transformed to the Carmichael eyes. There was a slight change in the height of the eyes, of course—a matter of perhaps three centimeters taller for Carmichael. He had to break his visual reactions out of perspective habits formed by more than two centuries at Bailey's height. But the change was more than that. He felt that he was seeing the day through many eyes—many more than the host's two.

The sensation of multiocular vision confused him, but he hadn't time to examine it before the law-niks pushed him into the one-way glass cage of an aircar. The door hissed closed, thumping on its seals, and he was alone, peering out through the blue-gray filtering of the windows. He leaned back on padded plastic.

The aircar leaped upward out of the plastrete canyon, sped across the great table-land roof of the Euthanasia Center toward the distant man-made peaks of IC. The central complex of government was an area the Tegas always had avoided. He wished nothing more now than to continue avoiding it.

A feeling came over him that his universe had shattered. He was trapped here—not just trapped in the aircar flitting toward the plastrete citadel of IC, but trapped in the ecosystem of the planet. It was a sensation he'd never before experienced—not even on that eons-distant day when he'd landed here in a conditioned host at the end of a trip which had taxed the limits of the host's viability. It was the way of the Tegas, though, to reach out for new planets, new hosts. It had become second nature to choose the right kind of planet, the right kind of developing life forms. The right kind always developed star travel, releasing the Tegas for a new journey, new explorations, new experiences. That way, boredom never intervened. The creatures of this planet were headed toward the stellar leap, too—given time.

But the Tegas, experiencing a fear that was new to him, realized he might not be around to take advantage of that stellar leap. It was a realization that left him feeling exhausted, time-scalded, injured in his responses like a mistreated instrument.

Where did I go wrong? he wondered. *Was it in the original choice of the planet?*

His Bacit half, usually so explicit in reaction to inner searchings, spread across their mutual awareness a projected sense of the fuzzy unknowns ahead.

This angered the Tegas. The future always was unknown. He began exploring his host-self, assessing what he could use in the coming showdown. It was a good host—healthy, strong, its mus-

culature and neural system capable of excellent Tegas reinforcement and intensification. It was a host that could give good service, perhaps even longer than Douglas Bailey. The Tegas began doing what he could in the time available, removing inhibitory blocks for quicker and smoother neural responses, setting up a heart and vascular system buffer. He took a certain pride in the work; he'd never misused a host as long as it remained viable.

The natural Tegas resilience, the thing that kept him going, kept him alive—the endless curiosity—reasserted itself. Whatever was about to happen, it would be new. He seated himself firmly in the host, harnessed the Carmichael memory system to his Tegas responses and readied himself to meet the immediate future.

A thought crept into his mind:

In the delicate immensity that was his own past there lay nonhuman experiences. How subtle was this "Total Profile of Personality?" Could it detect the non-human? Could it cast a template which would compare too closely with Douglas Bailey . . . or any of the others they might have on their Data Center lists?

He sensed the dance of the intellects within him, pounding out their patterns on the floor of his awareness. In a way, he knew he was all the captive stalks bound up like a sheaf of grain.

The city-scape passing beneath the aircar became something sensed rather than seen. Tiny frenzies of fear began to dart about in him. What tools of psychometry would his interrogators use? How discrete? How subtle? Beneath their probes, he must be nothing other than Joe Carmichael. Yet . . . he was far more. He felt the current of *now* sweeping his existence toward peril.

Danger-danger-danger. He could see it intellectually as the Tegas. He responded to it as Joe Carmichael.

Sweat drenched his body.

The aircar began to descend. He stared at the backs of the androids' heads, visible through the glass of the control cab. They were two emotionless blobs; no help there. The car left the daylight, rocked once in a recognition-field, slid down a tube filled with cold aluminum light into the yellow glowing of a gigantic plastrete parking enclosure—tawny walls and ceiling, a sense of cavernous distance humming with activity.

It made the Tegas think of a hive society he'd once experienced; not one of his better memories. He shuddered.

The aircar found its parking niche, stopped. Presently, the doors hissed open. The androids flanked the opening. One gestured for him to emerge.

The Tegas swallowed in a dry

Carmichael throat, climbed out, stared around at the impersonal comings and goings of androids. Neither by eye or emotional aura could he detect a human in the region around him. Intense loneliness came over him.

Still without speaking, the androids took his arms, propelled him across an open space into the half-cup of a ring lift. The field grabbed them, shot them upward past blurred walls and flickers of openings. The lift angled abruptly, holding them softly with their faces tipped townward at something near forty-five degrees. The androids remained locked beside him like two fish swimming in the air. The lift grip returned to vertical, shot them upward into the center of an amphitheater room.

The lift hole became floor beneath his feet.

The Tegas stared up and around at a reaching space, immense blue skylight, people-people-people, tiers of them peering down at him, tiers of them all around.

He probed for emotions, met the terrifying aura of the place, an icy neural stare, a psychic *chutzpa*. The watchers—rulers all, their minds disconnected from any religion except the *self*, no nervous coughs, no impatient stirrings.

They were an iceberg of silent waiting.

He had never imagined such a place even in a nightmare. But he knew this place, recognized it immediately. If a Tegas must end, he thought, then it must be in some such place as this. All the lost experiences that might come to an end here began wailing through him.

Someone emerged from an opening on his left, strode toward him across the floor of the amphitheater: Vicentelli.

The Tegas stared at the approaching man, noted the eyes favored by deep shadows: dense black eyes cut into a face where lay a verseless record—hard glyphs of cheeks, stone-cut mouth. Everything was labor in that face: work-work-work. It held no notion of fun. It was a contrivance for asserting violence, both spectator and participant. It rode the flesh, cherishing no soft thing at all.

A vat of liquid as blue as glowing steel arose from the floor beside the Tegas. Android hands gripped him tightly as he jerked with surprise.

Vicentelli stopped in front of him, glanced once at the surrounding banks of faces, back to his victim.

"Perhaps you're ready to save us the trouble of an interrogation in depth," he said.

The Tegas felt his body tremble, shook his head.

Vicentelli nodded.

With impersonal swiftness, the

androids stripped the clothing from the Tegas host, lifted him into the vat. The liquid felt warm and tingling. A harness was adjusted to hold his arms and keep his face just above the surface. An inverted dome came down to rest just above his head. The day became a blue stick of light, and he wondered inanely what time it was. It'd been early when he'd entered the Euthanasia Center; now, it was very late. Yet, he knew the day had hardly advanced past midmorning.

Again, he probed the emotional aura, recoiled from it.

What if they kill me coldly? he wondered.

Where he could single out individuals, he was reminded of the play of lightning on a far horizon. The emotional beacons were thin, yet filled with potency.

A room full of rulers. The Tegas could imagine no more hideous place.

Something moved across his stick of light: Vicentelli.

"Who are you?" Vicentelli asked.

I'm Joe Carmichael, he thought. *I must be only Joe Carmichael.*

But Carmichael's emotions threatened to overwhelm him. Outrage and submissive terror flickered through the neural exchanges. The host body twitched. Its legs made faint running motions.

Vicentelli turned away, spoke to the surrounding watchers:

"The problem with Joseph Carmichael is this violent incident which you're now seeing on your recorders. Let me impress upon you that this incident was not predicted. It was outside our scope. We must assume, therefore, that it was not a product of Joseph Carmichael. During this examination, each of you will study the exposed profile. I want each of you to record your reactions and suggestions. Somewhere here there will be a clue to the unknowns we observed in Douglas Bailey and before that in Almiro Hsing. Be alert, observant."

God of Eternity! The Tegas thought. *They've traced me from Hsing to Bailey!*

This change in human society went back farther than he'd suspected. How far back?

"You will note, please," Vicentelli said, "that Bailey was in the immediate vicinity when Hsing fell from the Peace Tower at Canton and died. Pay particular attention to the material which points to a previous association between Hsing and Bailey. There is a possibility Bailey was at that particular place on Hsing's invitation. This could be important."

The Tegas tried to withdraw his being, to encyst his emotions. The ruling humans had gone down a developmental sidepath

he'd never expected. They had left him somewhere.

He knew why: Tegas-like, he had immersed himself in the concealing presence of the mob, retreated into daily drudgery, lived like the living. Yet, he had never loved the flesh more than in this moment when he knew he could lose it forever. He loved the flesh the way a man might love a house. This intricate structure was a house that breathed and felt.

Abruptly, he underwent a sense of union with the flesh more intimate than anything of his previous experience. He knew for certainty in this instant how a man would feel here. Time had never been an enemy of the Tegas. But Time was man's enemy. He was a man now and he prepared his flesh for maximum reactions, for high-energy discharge.

Control: that was what this society was up to—supercontrol.

Vicentelli's face returned to the stick of light.

"For the sake of convenience," he said, "I'll continue to call you Carmichael."

The statement told him baldly that he was in a corner and Vicentelli knew it. If the Tegas had any doubts, Vicentelli now removed them.

"Don't try to kill yourself," Vicentelli said. "The mechanism in which you now find yourself can sustain your life even when you least wish that life to continue."

Abruptly, the Tegas realized his Carmichael self should be panic-stricken. There could be no Tegas watchfulness or remoteness here.

He was panic-stricken.

The host body threshed in the liquid, surged against the bonds. The liquid was heavy—oily, but not oily. It held him as an elastic suit might, damping his movements, always returning him to the quiescent, fish-like floating.

"Now," Vicentelli said.

There was a loud click.

Light dazzled the Carmichael eyes. Color rhythms appeared within the light. The rhythms held an epileptic beat. They jangled his mind, shook the Tegas awareness like something loosed in a violent cage.

Out of the void which his universe had become there appeared questions. He knew they were spoken questions, but he saw them: word shapes tumbling in a torrent.

"Who are you?"

"What are you?"

"We see you for what you are. Why don't you admit what you are? We know you."

The aura of the surrounding watchers drummed at him with accusing vibrations: "We know you—know you—know you—know you . . ."

The Tegas felt the words rocking him, subduing him.

No Tegas can be hypnotized, he told himself. But he could feel his being coming out in shreds. Something was separating. Carmichael! The Tegas was losing his grip on the host! But the flesh was being reduced to a mesmerized idiot. The sense of separation intensified.

Abruptly, there was an inner sensation of stirring, awakening. He felt the host ego awakening, was powerless to counter it.

Thoughts crept along the dancing, shimmering neural paths—

"Who . . . what are . . . were do . . ."

The Tegas punched frantically at the questions: "I'm Joe Carmichael . . . I'm Joe Carmichael . . . I'm Joe Carmichael . . ."

He found vocal control, mouthed the words in dumb rhythm, making this the one answer to all questions. Slowly, the host fell silent, smothered in a Tegas envelope.

The blundering, bludgeoning interrogation continued.

Shake-rattle-question.

He felt himself losing all sense of distinction between Tegas and Carmichael. The Bacit-half, whipped and terrorized by the unexpected sophistication of this attack, strewed itself in tangles through the identity net.

Voices of old hosts came alive in his mind: ". . . you can't . . . mustn't . . . I'm Joe Carmichael . . . stop them . . . why can't we . . ."

"You're murdering me!" he screamed.

The ranked watchers in the amphitheater united in an aura of pouncing glee.

"They're monsters!" Carmichael thought.

It was a pure Carmichael thought, unmodified by the Tegas awareness, an unfettered human expression surging from within.

"You hear me, Tegas?" Carmichael demanded. "They're monsters!"

The Tegas crouched in the flesh not knowing how to counter this. Never before had he experienced direct communication from a host after that final entrapment. He tried to locate the source of communication, failed.

"Look at 'em staring down at us like a pack of ghouls!" Carmichael thought.

The Tegas knew he should react, but before he could bring himself to it, the interrogation assumed a new intensity: shake-rattle-question.

"Where do you come from? Where do you come from? Where do you come from?"

The question tore at him with letters tall as giant buildings—faceless eyes, thundering voices, shimmering words.

Carmichael anger surged across the Tegas.

Still, the watchers radiated their chill amusement.

"Let's die and take one of 'em!" Carmichael insisted.

"Who speaks?" the Bacit demanded. "How did you get away? Where are you?"

"God! How cold they are." That had been a Bailey thought.

"Where do you come from?" the Bacit demanded, seeking the host awareness. "You are here, but we cannot find you."

"I come from Zimbue," Carmichael projected.

"You cannot come from Zimbue," the Tegas countered. "I come from Zimbue."

"But Zimbue is nowhere," the Bacit insisted.

And all the while—shake-rattle-question—Vicentelli's interrogation continued to jam circuits.

The Tegas felt he was being bombarded from all sides and from within. How could Carmichael talk of Zimbue?

"Then whence comest thou?" Carmichael asked.

How could Carmichael know of this matter? The Tegas asked himself. Whence had all Tegas come? The answer was a rote memory at the bottom of all his experiences: At the instant Time began, the Tegas intruded upon the blankness where no star—not even a primal dust fleck—had tracked the dimensions with its being. They had been where senses had not been. How could Carmichael's ego still exist and know to ask of such things?

"And why shouldn't I ask?" Carmichael insisted. "It's what Vicentelli asks."

But where had the trapped ego of the host flesh hidden? Whence took it an existence to speak now?

The Bacit-half had experienced enough. "Say him down!" the Bacit commanded. "Say him down! We are Joe Carmichael! You are Joe Carmichael! I am Joe Carmichael!"

"Don't panic," Carmichael soothed. "You are Tegas/Bacit, one being. I am Joe Carmichael."

And from the outer world, Vicentelli roared: "Who are you? I command you to tell me who you are! You must obey me! Are you Douglas Bailey?"

Silence—inward and outward.

In the silence, the Tegas probed the abused flesh, understood part of the method behind Vicentelli's attack. The liquid in which the host lay immersed: it was an anesthetic. The flesh was being robbed of sensation until only inner nerve tangles remained. Even more—the anesthetized flesh had been invaded by a control device. A throbbing capsule lay against the Carmichael spine—signaling, commanding, interfering.

"The capsule has been attached," Vicentelli said. "I will take him now to the lower chamber where the interrogation can

proceed along normal channels. He's completely under our control now."

In the trapped flesh, the Bacit-half searched out neural connections of the control capsule, tried to block them, succeeded only partly. Anesthetized flesh resisted the Bacit's probes. The Tegas, poised like a frightened spider in the host awareness, studied the softly throbbing neural currents for a solution. Should he attack, resume complete control? What could he attack? Vicentelli's interrogation had tangled identities in the host in a way that might never be unraveled.

The control capsule pulsed.

Carmichael's flesh obeyed a new command. Restraining bands slid aside. The Tegas stood up in the tank on unfeeling feet. Where his chest was exposed, sensation began to return. The inverted hemisphere was lifted away from his head.

"You see," Vicentelli said, addressing the watchers above them. "He obeys perfectly."

Inwardly, Carmichael asked, "Tegas, can you reach out and see how they feel about all this? There might be a clue in their emotions."

"Do it!" the Bacit commanded.

The Tegas probed surrounding space, felt boredom, undertones of suspicion, a cat-licking sense of power. Yes, the mouse lay trapped between claws and could not escape.

Android hands helped the Tegas out of the tank, stood him on the floor, steadied him.

"Perfect control," Vicentelli said.

As the control capsule commanded, the Carmichael eyes stared straight ahead with a blank emptiness.

The Tegas sent a questing probe along the nearest channels, met Bacit, Carmichael, uncounted bits of others.

"How can you be here, Joe Carmichael?" he asked.

The host flesh responded to a capsule command, walked straight ahead across the floor of the amphitheater.

"Why aren't you fleeing or fighting me?" the Tegas insisted.

"No need," Carmichael responded. "We're all mixed up together, as you can see."

"Why aren't you afraid?"

"I was . . . am . . . hope not to be."

"How do you know about the Tegas?"

"How not? We're each other."

The Tegas experienced a shock-blink of awareness at this, felt an uneasy Bacit-projection. Nothing in all the Tegas' experience recalled such an inner encounter. The host fought and lost or the Tegas ended there. And the lost host went . . . where? A fearful question came from the Bacit, a sense of broken continuity.

That damnable interrogation!

The host flesh, responding to the capsule's commands, had walked through a doorway into a blue hallway. As sensation returned, Tegas/Carmichael/Bacit grew aware of Vicentelli following . . . and other footsteps—android law-niks.

"What do you want, Joe Carmichael?" the Tegas demanded.

"I want to share."

"Why?"

"You're . . . more than I was. You can give me . . . longer life. You're curious . . . interesting. Half the creeps we got at the E-Center were worn down by boredom, and I was almost at that stage myself. Now . . . living is interesting once more."

"How can we live together—in here?"

"We're doing it."

"But I'm the Tegas! I must rule in here!"

"So rule."

And the Tegas realized he had been restored to almost complete contact with the host's neural system. Still, the intrusive Carmichael ego remained. And the Bacit was doing nothing about this situation, appeared to have withdrawn to wherever the Bacit went. Carmichael remained—a slithering, mercurial thing: right there! No! Over here! No . . . no . . . not there, not here. Still, he remained.

"The host must submit without reservation," the Tegas commanded.

"I submit," Carmichael agreed.

"Then where are you?"

"We're all in here together. You're in command of the flesh, aren't you?"

The Tegas had to admit he was in command.

"What do you want, Joe Carmichael?" he insisted.

"I've told you."

"You haven't."

"I want to . . . watch . . . to share."

"Why should I let you do that?"

Vicentelli and his control capsule had brought the host flesh now to a drop-chute. The chute's field gripped the Carmichael's flesh, sent it whispering downward . . . downward . . . downward.

"Maybe you have no choice in whether I stay and watch," Joe Carmichael responded.

"I took you once," the Tegas countered. "I can take you again."

"What happens when they resume the interrogation?" Carmichael asked.

"What do you mean?"

"He means," the Bacit intruded, "that the true Joe Carmichael can respond with absolute verisimilitude to their search for a profile comparison."

The drop-chute disgorged him into a long icy-white laboratory space. Through the fixated eyes

came a sensation of metal shapes, of instruments, of glitterings and flashings, of movement.

The Tegas stood in capsule-induced paralysis. It was a condition any Tegas could override, but he dared not. No human could surmount this neural assault. The merest movement of a finger now amounted to exposure.

In the shared arena of their awareness, Carmichael said, "Okay, let me have the con for a while. Watch. Don't intrude at all."

The Tegas hesitated.

"Do it!" the Bacit commanded.

The Tegas withdrew. He found himself in emptiness, a nowhere of the mind, an unseen place, constrained vacuity . . . nothing . . . never . . . an unspoken, unspeaking pill of absence . . . uncontained. This was a place where senses had not been, could not be. He feared it, but felt protected by it—hidden.

A sense of friendship and reassurance came to him from Carmichael. The Tegas felt a hopeless sense of gratitude for the first other-creature friendship he'd ever experienced. But why should the Carmichael-ego be friendly? Doubt worried at him, nipped and nibbled. Why?

No answer came, unless an unmeasured simplicity radiating from the Bacit could be interpreted as answer. The Tegas found he had an economy of reservations about his position. This astonished him. He recognized he was making something new with all the dangers inherent in newness. It wasn't logical, but he knew thought might be the least careless when it was the least logical.

Time is the enemy of the flesh, he reminded himself. *Time is not my enemy.*

Reflections of meaning, actions and intentions began coming to him from the outer-being-place where Carmichael sat. Vicentelli had returned to the attack with induced colors, shapes, flarings and dazzles. Words leaped across the Tegas mind-sky: "Who are you? Answer! I know you're there! Answer! Who are you?"

Joe Carmichael mumbled half-stupefied protests: "Why're you torturing me? What're y' doing?"

Shake-rattle-question: "STOP HIDING FROM ME!"

Carmichael's response wiggled outward: "Wha' y' doing?"

Silence enveloped the flesh.

The Tegas began receiving muted filterings of a debate: "I tell you, his profile matches the Carmichael identity with exactness." . . . "Saw him change." . . . ". . . perhaps chemical poisoning . . . Euthanasia Center . . . consistent with ingestion of picrotoxin . . . coincidence . . ."

Creeping out into the necessary neural channels, the Tegas probed his surroundings for the emotional aura, found only Vicentelli and

two androids. The androids were frigid, emotionless shells. Vicentelli was a blazing core of frustrated anger.

Voices rained from a communications screen in the lab ceiling: "Have an end to it!" "Eliminate him and have done with it!" "This is a waste of time!" "You're mistaken, Vic!" "Stop wasting our time!"

They were commanding death for the Carmichael flesh, the Tegas realized. He thought of an arena, its rim dripping with thumbs: death. Those had been the days—short-lived hosts and easy transfers. But now: Would he dare tackle Vicentelli? It was almost certain failure, and the Tegas knew it. The hard shell of a ruler's ego could resist any assault.

A sharp "snap!" echoed in the lab. The communications screen went blank.

What now? the Tegas wondered.

"If Bailey's death didn't eliminate it," Vicentelli muttered, "why should the death of Carmichael be any different? What can stop it? The thing survived Hsing, and lord knows how many before that."

The Tegas felt his Bacit-half flexing unseen membranes.

"If I'm right," Vicentelli muttered, "the thing lives on forever in host bodies. It lives—enjoys . . . What if life were not . . . enjoyable?"

"The death of this human has been commanded," one of the androids said. "Do you wish us to leave?"

"Leave . . . yes," Vicentelli said.

The frigid android radiations receded, were gone.

The other rulers who'd been watching through the screen were convinced Vicentelli was wrong, the Tegas realized. But they'd commanded death for Carmichael. The androids had been sent away, of course: they could have no part in a human death.

The Tegas felt Carmichael cringing, demanding: "What'll we do?"

The Bacit tested a muscle in the host's left arm, a muscle the host had never before consciously sensed. Flesh rippled, relaxed.

"Exposure means final dissolution," the Tegas warned. It was his most basic inhibition. "We must remain cryptic in color and behavior, impossible to separate from any background."

"We're already exposed!" It was a pure Joe Carmichael thought. "What'll we do?"

A sensation of flowing wetness radiated from the control capsule on the host's spine.

"All right," Vicentelli said. "They don't believe me. But we're alone now." He stared into the Carmichael eyes. "And I can try whatever I want. What if your life isn't enjoyable, eh?"

The sensation of wetness reached the brain.

Immediate blackness!

The Tegas recoiled upward, fighting past the neural shock, regaining some awareness. Carmichael's neural system quivered and rolled, filtered out some sounds, let others through with a booming roar. The Tegas felt outraged by scraping tactility—harsh movements, rollings.

Vicentelli was doing something at a glittering console directly in front of him.

The rolling sensation went on and on and on—swaying, dipping, gliding . . . and pain.

The Tegas, measuring out his attention, felt the shuttlecock entanglement of his being with that of Carmichael. Blank spots were Carmichael . . . fuzzy grayness . . . and tightly stretched threads that linked bulbs of ego-reserve. There! There! And there! Pieces of Carmichael, all quiescent.

The Bacit nudged his awareness, an inner touch like the prickling of cactus spines. Whisper-thoughts came: "Got to get out of here. Trapped. Got to get out of here. Trapped-trapped."

He was forming verbal concepts in thousands of languages simultaneously.

What was Vicentelli doing?

The Tegas felt a pulse from the control capsule. A leg twitched. He snapped a reflex block onto that neural region to resume control. One eye opened, rolled. The Tegas fought for control of the visual centers, saw a multifaceted creation of wires and crystals directly above him, blurs of green movement. All focused on the control capsule. The host's flesh felt as though it had been encased in a tight skin.

Vicentelli swam into his range of vision.

"Now, let us see how long you can hide," Vicentelli said. "We call this the torture skin." He moved something on the control consule.

The Tegas felt alertness return. He moved a left foot. Pain slashed at knee and ankle.

He gasped. Pain raked his back and chest.

"Very good," Vicentelli said. "It's the movements you make, do you understand? Remain unmoving, no pain. Move—pain."

The Tegas permitted his host to take a deep, quivering breath. Knives played with his chest and spine.

"To breathe, to flex a wrist, to walk—all equal pain," Vicentelli said. "The beauty of it is there's no bodily harm. But you'll pray for something as simple as injury unless you give up."

"You're an animal!" The Tegas managed to say. Agony licked along his jaw and lips, flayed his temples.

"Give up," Vicentelli said.

"Animal," the Tegas whis-

pered. He felt his Bacit-half throwing pain blocks into the neural system, tried a shallow breath. Faint irritation rewarded the movement, but he simulated a full pain reaction—closed his eyes. Fire crept along his brows. A swift block eased the pain.

"Why prolong it?" Vicentelli asked. "What are you?"

"You're insane," the Tegas whispered. He waited, feeling the pain blocks click into place.

Darting lights glittered in Vicentelli's eyes. "Do you really feel the pain?" he asked. He moved a handle on the console.

The host was hurled to the floor by a flashing command from the control capsule.

Under Bacit guidance, he writhed with the proper pain reactions, allowed them to subside slowly.

"You feel it," Vicentelli said. "Good." He reached down, jerked his victim upright steadied him.

The Bacit had almost all the pain under control, signaling proper concealment reactions. The host flesh grimaced, resisted movement, stood awkwardly.

"I have all the time I need," Vicentelli said. "You cannot outlast me. Surrender. Perhaps I may find a use for you. I know you're there, whatever you are. You must realize this by now. You can speak candidly with me. Confess. Explain yourself. What are you? What use can I make of you?"

Moving his lips stiffly as though against great pain, the Tegas said, "If I were what you suggest, what would I fear from such as you?"

"Very good!" Vicentelli crowed. "We progress. What should you fear from me? Hah! And what should I fear from you?"

"Madman," the Tegas whispered.

"Ahh, now," Vicentelli said. "Hear if this is mad: My profile on you says I should fear you only if you die. Therefore, I will not kill you. You may wish to die, but I will not permit you to die. I can keep that body alive indefinitely. It will not be an enjoyable life, but it will be life. I can make you breathe. I can make your heart work. Do you wish a full demonstration?"

The inner whispers resumed and the Tegas fought against them. "We can't escape. Trapped."

The Bacit radiated hesitant uncertainty.

A Bailey thought: "It's a nightmare! That's what!"

The Tegas stood in wonder: a Bailey thought!

Bacit admonitions intruded: "Be still. We must work together. Serenity . . . serenity . . . serenity . . ."

The Tegas felt himself drifting off on waves of tranquillity, was shocked by a Bacit thought-scream: "NOT YOU!"

Vicentelli moved one of his console controls.

The Tegas let out a muffled scream as both his arms jerked upward.

Another Vicentelli adjustment and the Tegas bent double, whipped upright.

Bacit-prompted whimpering sounds escaped his lips.

"What are you?" Vicentelli asked in his softest voice.

The Tegas sensed the frantic inner probings as the Bacit searched out the neural linkages, blocked them. Persperation bathed the host flesh.

"Very well," Vicentelli said. "Let us go for a long hike."

The host's legs began pumping up and down in a stationary march. The Tegas stared straight ahead, pop-eyed with simulation of agony.

"This will end when you answer my questions," Vicentelli said. "What are you? Hup-two-three-four. Who are you? Hup-two-three-four . . ."

The host flesh jerked with obedience to the commands.

The Tegas again felt the thousands of old languages taking place within him—a babble. With an odd detachment, he realized he must be a museum of beings and remembered energies.

"Ask yourself how long you can stand this," Vicentelli said.

"I'm Joe Carmichael," the Tegas gasped.

Vicentelli stepped close, studied the evidences of agony. "Hup-two-three-four . . ."

Still, the babble persisted. He was a flow of energy, the Tegas realized. Energy . . . energy . . . energy. Energy was the only *solid* in the universe. He was wisdom seated in a bed of languages. But wisdom chastised the wise and spit upon those who came to pay homage. Wisdom was for copyists and clerks.

Power, then, he thought.

But power, when exercised, fragmented.

How simple to attack Vicentelli now, the Tegas thought. *We're alone. No one is watching. I could strike him down in an instant.*

The habits of all that eons-long history inhibited action. Inevitably, he had picked up some of the desires, hopes and fears—especially the fears—of his uncounted hosts. Their symbols sucked at him now.

A pure Bailey thought: "We can't keep this up forever."

The Tegas felt Bailey's sharings, and Carmichael's, the mysterious coupling of selves, the never-before engagement with the captive.

"One clean punch," Carmichael insisted.

"Hup-two-three-four," Vicentelli said, peering closely at his victim.

Abruptly, the Tegas felt himself looking inward from the far

end of his being. He saw all his habits of thought contained in the shapes of every action he'd ever contemplated. The thoughts took form to control flesh, a blaze of energy, a *solid*. In that flaring instant, he became pure performance. All the violent killers the Tegas had overwhelmed rose up in him, struck outward, and he *was* the experience—overpoweringly single with it, not limited by any description . . . without symbols.

Vicentelli lay unconscious on the floor.

The Tegas stared at his own right hand. The thing had taken on a life of its own. Its movement had been unique to the moment, a flashing jab with fingers extended, a crushing impact against a nerve bundle in Vicentelli's neck.

Have I killed him? he wondered.

Vicentelli stirred, groaned.

So there'd been Tegas inhibitions on the blow, an exquisite control that could overpower but not kill, the Tegas thought.

The Tegas moved to Vicentelli's head, stooped to examine him. Moving, he felt the torture skin relax, glancing up at the green-glowing construction he realized the thing's field was limited.

Again, Vicentelli groaned.

The Tegas pressed the nerve bundle in the man's neck. Vicentelli subsided, went limp.

Pure Tegas thoughts rose up in the Carmichael neural system. He realized he'd been living for more than a century immersed in a culture which had regressed. They had invented a new thing—almost absolute control—but it held an old pattern. The Egyptians had tried it, and many before them, and a few since. The Tegas thought of the phenomenon as the man-machine. Pain controlled it—and food . . . pleasure, ritual.

The control capsule irritated his senses. He felt the aborted action message, a faint echo, Bacit-repressed: "Hup-two-three-four . . ." With the action message went the emotional inhibitions deadly to the Tegas' survival.

The Tegas felt sensually subdued. He thought of a world where no concentrated emotions remained, no beacons upon which he could home his short-burst transfer of identity.

The Carmichael flesh shuddered to a Tegas response. The Bacit stirred, transmitting sensations of urgency.

Yes, there was urgency. Androids might return. Vicentelli's fellow rulers might take it upon themselves to check the activity in this room.

He reached around to his back, felt the control capsule: a flat, tapered package . . . cold, faintly pulsing. He tried to insert a finger beneath it, felt the flesh rebel. Ahhh, the linkage was mortal. The diabolic thing joined the

spine. He explored the connections internally, realized the thing could be removed, given time and the proper facilities.

But he had not the time.

Vicentelli's lips made feeble writhings—a baby's mouth searching for the nipple.

The Tegas concentrated on Vicentelli. A ruler. Tegas rightly avoided such as this. Vicentelli's kind knew how to resist the mind-swarm. They had ego power.

Perhaps the Vicentellis had provided the key to their own destruction, though. Whatever happened, the Tegas knew he could never return into the human mass. The new man-machine provided no hiding place. In this day of new things, another new thing had to be tried.

The Tegas reached for the control capsule on his back, inserted three fingers beneath it. With the Bacit blocking off the pain, he wrenched the capsule free.

All sensation left his lower limbs. He collapsed across Vicentelli, brought the capsule around to study it. The removal had dealt a mortal blow to the Carmichael host, but there were no protests in their shared awareness, only a deep curiosity about the capsule.

Simple, deadly thing—operation obvious. Barbed needles protruded along its inner surface. He cleaned shreds of flesh from them, working fast. The host was dying rapidly, blood pumping onto the floor—and spinal fluid. He levered himself onto one elbow, rolled Vicentelli onto one side, pulled away the man's jacket and shirt. A bit of fleshly geography, a ridge of spine lay exposed.

The Tegas knew this landscape from the inward examination of the capsule. He gauged the position required and slapped the capsule home.

Vicentelli screamed.

He jerked away, scrabbled across the floor, leaped upright.

"Hup-two-three-four . . ."

His legs jerked up and down in terrible rhythm. Sounds of agony escaped his lips. His eyes rolled.

The Carmichael body slumped to the floor, and the Tegas waited for the host to die. Too bad about this host—a promising one—but he was committed now. No turning back.

Death came as always, a wink-out, and after the flicker of blankness, he centered on the emotional scream which was Vicentelli. The Tegas divided from dead flesh, bore away with that always-new sensation of supreme discovery—a particular thing, relevant to nothing else in the universe except himself.

He was pain.

But it was pain he had known, analyzed, understood, and could isolate. The pain contained all there was of Vicentelli's identity. Encapsulated that way, it could be absorbed piecemeal, shredded

off at will. And the new host's flesh was grateful. With the Tegas came surcease from pain.

Slowly, the marching subsided.

The Tegas blocked off control circuits, adjusted Vicentelli's tunic to conceal the capsule on his back, paused to contemplate how easy this capture had been. It required a dangerous change of pattern, yes: a Tegas must dominate, risk notice—not blend with his surroundings.

With an abrupt sense of panic, Douglas Bailey came alive in his awareness. "We made it!"

In that instant, the Tegas was hanging by the hook of his being, momentarily lost in the host he'd just captured. The intermittency of mingled egos terrified and enthralled. As he had inhabited others, now he was inhabited.

Even the new host—silent, captivated—became part of a changed universe, one that threatened in a different way: all maw. He realized he'd lost contact with the intellectual centers. His path touched only nerve ends. He had no home for his breath, couldn't find the flesh to wear it.

Bacit signals darted around him: a frantic, searching clamor. The flesh—the flesh—the flesh . . .

He'd worn the flesh too gently, he realized. He'd been lulled by its natural laws and his own. He'd put aside all reaching questions about the organism, had peered out of the flesh unconcerned, leaving all worries to the Bacit.

One axiom had soothed him: *The Bacit knows.*

But the Bacit was loosed around him, and he no longer held the flesh. The flesh held him, it threatened to choke him.

The flesh cannot choke me, he thought. *It cannot. I love the flesh.*

Love—there was a toehold, a germ of contact. The flesh remembered how he had eased its agony. Memories of other flesh intruded. Tendrils of association accumulated. He thought of all the flesh he'd loved on this world: the creatures with their big eyes, their ears flat against their heads, smooth caps of hair, beautiful mouths and cheeks. The Tegas always noticed mouths. The mouth betrayed an infinite variety of things about the flesh around it.

A Vicentelli self-image came into his awareness, swimming like a ghost in a mirror. The Tegas thought about that verseless record, the stone-cut mouth. No notion of fun—that was the thing about Vicentelli's mouth.

He'll have to learn fun now, the Tegas thought.

He felt the feet then, hard against the floor, and the Bacit was with him. But the Bacit had a voice that touched the auditory centers from within. It was the voice of Douglas Bailey and countless others.

"Remove the signs of struggle before the androids return," the voice said.

He obeyed, looked down at the empty flesh which had been Joe Carmichael. But Joe Carmichael was with him in this flesh, Vicentelli's flesh, which still twitched faintly to the broadest commands transmitted through the capsule on his spine.

"Have to remove that capsule as soon as possible," the Bacit-voice reminded. "You know the way to do it."

The Tegas marveled at the Vicentelli overtones suddenly noticeable in the voice. Abruptly, he glimpsed the dark side of his being through Vicentelli, and he saw an aspect of the Bacit he'd never suspected. He realized he was a net of beings who enjoyed their captivity, were strong in their captivity, would not exchange it for any other existence.

They *were* Tegas in a real sense, moving him by habits of thought, shaping actions out of uncounted mediations. The Bacit-half had accumulated more than forty centuries of mediations on this one world. And there were uncounted worlds before this one.

Language and thought.

Language was the instrument of the sentient being—yet, the being was the instrument of language, as the Tegas was the instrument of the Bacit. He searched for significant content in this new awareness, was chided by the Bacit's sneer. To search for content was to search for limits where there were no limits. Content was logic and classification. It was a word-sieve through which to judge experience. It was nothing in itself, could never satisfy.

Experience, that was the thing. Action. The infinite re-enactment of life accompanied by its endless procession of images.

There are things to be done, the Tegas thought.

The control capsule pulsed on his spine.

The capsule, yes—and many more things.

They have bugged the soul, he thought. *They've mechanized the soul and are forever damned. Well, I must join them for a while.*

He passed a hand through a call beam, summond the androids to clear away the discarded host that had been Carmichael.

A door opened at the far end of the lab. Three androids entered, marching in line toward him. They were suddenly an amusing six-armed figure, their arms moving that way in obedient cadence.

The Vicentelli mouth formed an unfamiliar smile.

Briefly, he set the androids to the task of cleaning up the mess in the lab. Then, the Tegas began the quiet exploration of his new host, a task he found remarkably easy with his new understanding.

The host cooperated. He explored Vicentelli slowly—strong, lovely, healthy flesh—explored as one might explore a strange land, swimming across coasts of awareness that loomed and receded.

A host had behavior that must be learned. It was not well to dramatize the Tegas difference. There would be changes, of course—but slow ones; nothing dramatic in its immediacy.

While he explored, he thought of the mischief he could do in this new role. There were so many ways to disrupt the man-machine, to revive individualism, to have fun. Lovely mischief.

Intermittently, he wondered what had become of the Bailey ego and the Carmichael ego. Only the Bacit remained in the host with him, and the Bacit transmitted a sensation of laughter.

(RUNESMITH, *from page 42*)
girl from the stairwell. She came through the door, and there was no sound of crashing washtub; she came through the room and there was no stench and death from the rune-trap.

She came toward him, lying there, without clothes, without sound, without pain or anger, and she extended her flawless arms to him in love. The pleasure of her love swept across the room. She wanted to give herself, to give him everything, all she was and all she could be, for no other return than his love. She wanted his love, all of his love, all of him, everything, all the substance and strength of him.

He half-rose to meet her, and then he knew what she was, and he trembled with the force of losing her, of destroying her, and he murmured words without vowels and a slimey darkness began to eat at her feet, her legs, her naked thighs, her torso, and she let one ghastly shriek as something took her, and her face dissolved in slime and darkness, and she was gone . . . and he fell back, weak.

Smith the runesmith let go his shred of wakefulness and plunged joyfully into the healing depths. It was not until he awakened, rested and strong and healthily starving, that he realized fully what else he had let go.

Guilt.

The sin was not his. He had been shaped to do what he had done. A terrible enemy had made him its instrument, its weapon.

The runesmith, smiling (how long since?) fumbled for the skin-bag of knucklebones. He closed his eyes, his strong, clear rested eyes, and turned his rested mind to the talent (inborn) and skills (instilled) in him alone of all men ever. No jaded, blind buckshot in the faces of his kin, done in anguish to stay alive, but the careful, knowing, precise drawing of a bead. The location, direction, range, were known to Smith the weapon in ways impossible to Smith the man.

The knucklebones spilled chatteringly on the floor.

The pattern was random; his talent and his skills understood it.

He murmured a new murmur.

Hunkered down on his haunches, he called up the power.

There was the faintest hiss of a breeze in the tumbled warren of his refuge, a breeze that was peculiarly bittersweet, the way Holland chocolates used to be. A chill breeze that broke sweat out on Smith's spine, in the hollows between his shoulder blades.

Then the screams began.

They were screams beyond sound, and surely only an immeasurable fraction of them reached Smith, so different were they in quality and kind from anything remotely human. Yet their echoes and their backlash

seemed to blur the world for a moment of horror beyond imagining. A soundless, motionless quake, the terror of countless billions of frightful beings facing death and (unlike the millions who had perished here) knowing it, knowing why.

Smith's skills knew, as Smith himself could not, that the universe was relieved of a plague.

Was it a long time later? Probably it was—Smith was never able to remember that—when he stood up and filled his lungs with the dusty, sweet air and looked out on tomorrow and forever with clear and guiltless eyes.

He tested his power. It was intact.

He walked to the inner and outer barriers, kicking them down. He looked out at the sunlit ruins of the city.

If I live, he thought (and barring accident I can live forever), I can build it up again. And if I don't, then at least I've fixed it so they have no enemies but themselves. Terrible as that might be, there are worse things.

He saw a flicker of movement in the distance, something feeble, hungry, misshapen, ragged.

The runesmith stepped out of the shadows, and walked toward the movement in the distance. There was sun now. For the first time. Because he wanted sun. And he wanted cool breezes. And the scent of good things in the air.

He could have it all now. They might never forgive him, but they could not harm him, and he would help them, as they had never been able to help themselves.

Perhaps it would be better now.

Mercury Mysteries—while they last—50¢ each; 3 for $1. Mercury, Box 271, Rockville Center, N.Y. 11571.

"ERB-dom/Fantasy Collector" 40 page monthly SF adzine (collectors/dealers-sales/want lists) plus articles, fiction and checklists on Burroughs and SF in general. 1500 issues circulated world wide. Free sample; 12/$2.50. Caz, Box 550, Evergreen, Colo. 80439.

SF-Fantasy books for sale. Gordon Barber, 35 Minneapolis Ave., Duluth, Minn. 55803.

Subscribe to the journal of southern fandom. NEUTRON: Box 10885, Atlanta, Ga. 30310.

Sale—Old F&SFs. Free List. Morris, 2412 Stuart, Berkeley, Calif. 94705.

FIRST EDITIONS—"Worm Ouroboros"; "Naked Sun" (signed by Asimov). Ray Schafer, 5614 Walnut St., Pgh., Pa. 15232.

Scifantasy material, new and used. Over fifty different Arkham House titles, plus many other clothbound editions from over ten other publishers. Also over 500 current paperback titles. Catalog 10¢. For comics and magazines please send want lists. MCB, 580 Post, Rochester, N.Y. 14619.

BUSINESS OPPORTUNITIES

FREE BOOK "999 Successful, Little-Known Businesses." Work home! Plymouth, 35Y, Brooklyn, New York 11218.

HYPNOTISM

LEARN WHILE ASLEEP Hypnotize with your recorder, phonograph. Astonishing details, sensational catalog free. Sleep-learning Research Association, Box 24-FS, Olympia, Washington, 98502.

FREE Hypnotism, Self-Hypnosis. Sleep learning Catalog! Drawer G-400, Ruidoso, New Mexico 88345.

Hypnotism Revealed. Free Illustrated Details. Powers, 12015 Sherman Road, North Hollywood, California 91605.

STAMPS

I PAY $250 each for 1924 1¢ green Franklin stamps, rotary perforated eleven ($2,500 unused). Send 25¢ for illustrated folders showing amazing prices paid for old stamps, coins, collections. Vincent, 85FSF, Bronx, New York 10485.

MISCELLANEOUS

FOREIGN EDITIONS of Fantasy and Science Fiction. A few copies of French, Spanish, German, Italian, and Portuguese editions available at 60¢ each; any four for $2.00-Mercury Press, Box 271, Rockville Centre, N.Y. 11571.

MAKE BIG MONEY raising chinchillas, rabbits, guinea pigs for us. Catalog—25¢. Keeney Brothers, New Freedom, Pa. 17349.

ESP LABORATORY. This new research/service group can help you. For FREE information write: Al G. Manning, ESP Laboratory, 1342 N. Fairfax Ave., No. 4, Los Angeles, Calif. 90046.

Remailing-Confidential $2.00. R. David Smith, 1018 Oxford Street, Berkeley, Calif. 94707.

College students! Beautiful scientific dininghall joke, 35¢. Dann, Box 113, Frederiksted, St. Croix, V.I. 00840.

SWINGERS! Broaden your horizons. Join exclusive organization seeking new active members. Swingers Group International, 210 Fifth Avenue, New York, N.Y. 10010.

NON-EARTHLING??? Did You come from another Galaxy in a previous lifetime??? Dr. Patricia Diegel, The Outstanding Immortality (Reincarnation) Expert can tell you. . . . Write for FREE information: P. O. Box 957, West Sacramento, Ca. 95691.

ONE FINGER GUITAR. Revolutionary new hobby system. Anyone can play any major chord with only one finger. Sing and play instantly. Coordinated record and booklet contain 10 impressive solos, melody and chords together, in rock, pop, blues and country style. Guaranteed fun and simple, requires no note reading. $3.00. Echo Studios, Box 504, Harvey, Ill. 60426.

COMMUNICATE with the Universal Plan. Improve your Life. New O-Cult Device allows you to do this in moments. Simple operation. "The First Step Dial," $1.00. MoonRiver-E, 99 Charles St., Boston, Massachusetts 02114.

PUBLISHING your book may make the difference. For publishing information write to Kaedmon Publishing Company, 150 Broadway, New York, N.Y. 10038, Suite 915.

Do you have something to advertise to sf readers? Books, magazines, typewriters, telescopes, computers, space-drives, or misc. Use the F&SF Market Place at these low, low rates: $3.00 for minimum of ten (10) words, plus 30¢ for each additional word. Send copy and remittance to: Adv. Dept., Fantasy and Science Fiction, 347 East 53 Street, New York, N. Y. 10022

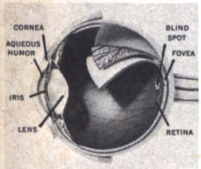
From the complex control centers of your brain
to the nerve endings in the tips of your toes—
you'll find it all fully explained and illustrated in

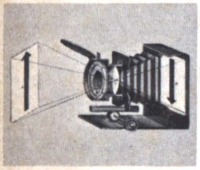
THE BODY

Borrow it for 10 days free from the
LIFE Science Library

Olympic gymnast springs high into the air during exercise that displays the use of only a few of his 600-odd muscles.

A particular combination of hereditary and environmental factors are reflected in the wrinkled features of this 77-year-old woman.





The eye is a natural color camera, effortlessly shifting focus from one distance to another by changing the curvature of its delicate lens.

While we marvel at our giant data processing machines, we tend to forget the incredible powers of the human machine which created them... the body. Consider your own brain. It weighs about three pounds, yet a computer big enough to process its daily activities would have to be the size of the Empire State Building. Or consider your fist-sized heart. It pumps 5,500 quarts of blood through 60,000 miles of "tubing" every day.

In recent years, science has made spectacular breakthroughs in probing the body's secrets. Now you can learn about the promise and the problems of transplanting living organs... how artificial kidneys actually work ...why arteries harden and what happens to your body when they do. You can read about the new "dry surgery" and the machine that makes it possible.

The Editors of TIME-LIFE BOOKS have brought together all these findings—and more—in *The Body*, introductory volume of the LIFE Science Library. You'll find 200 pages of absorbing information, with 160 illustrations (80 in full color). There's a unique tabulation of human variables, a life span world map, a sex differences guide, and a 9-page board game to teach you physical processes.

Because of its large print orders, TIME-LIFE BOOKS can offer you *The Body* at much less than you'd normally pay for a book of this size, scope, and quality—only $4.95 ($5.25 in Canada) plus shipping and handling.

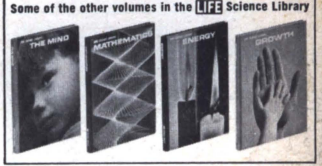
SEND NO MONEY

You and your youngsters are invited to enjoy *The Body* for 10 days, absolutely free. If you're not delighted with it, just return it and owe nothing. If you want to own *The Body*, you pay only $4.95 ($5.25 in Canada).

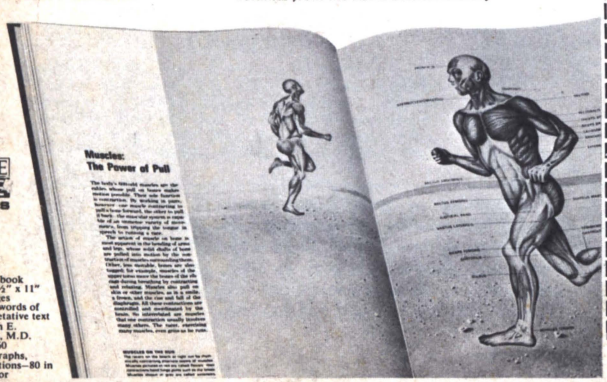
If you keep *The Body*, you will have the privilege of previewing future volumes in the LIFE Science Library, sent every two months at the same low price. The 10-day Free Trial applies to all volumes, and you may end this arrangement any time simply by notifying us.

The subject is *your* body. You'll find it fascinating. So fill out and mail the coupon today.

Some of the other volumes in the LIFE Science Library



More than 1,600,000 families have already ordered volumes from the LIFE Science Library



TIME LIFE BOOKS

- Actual book size: 8½" x 11"
- 200 pages
- 35,000 words of interpretative text by Alan E. Nourse, M.D.
- Over 160 photographs, illustrations—80 in full color

TIME-LIFE BOOKS, Dept. 6224
P.O. Box 2956
Clinton, Iowa 52732

Please enroll me as a subscriber to the LIFE Science Library and send me *The Body* for a 10-day Trial Examination. If, at the end of that time, I decide not to continue the series, I will return the book, canceling my subscription. If I keep the book, I will pay $4.95 ($5.25 in Canada) plus shipping and handling. I understand that future volumes will be issued on approval at two-month intervals, at the same price of $4.95 ($5.25 in Canada). The 10-day Free Examination privilege applies to all volumes in the library, and I may cancel my subscription at any time.

Name_____
(please print)
Address_____
City_____
State_____ Zip_____

1—240—1— 16774

Schools and Libraries:
Order Publishers' Library Editions from Silver Burdett Co., Morristown, N.J. 07960. Eligible for Titles I, II funds.