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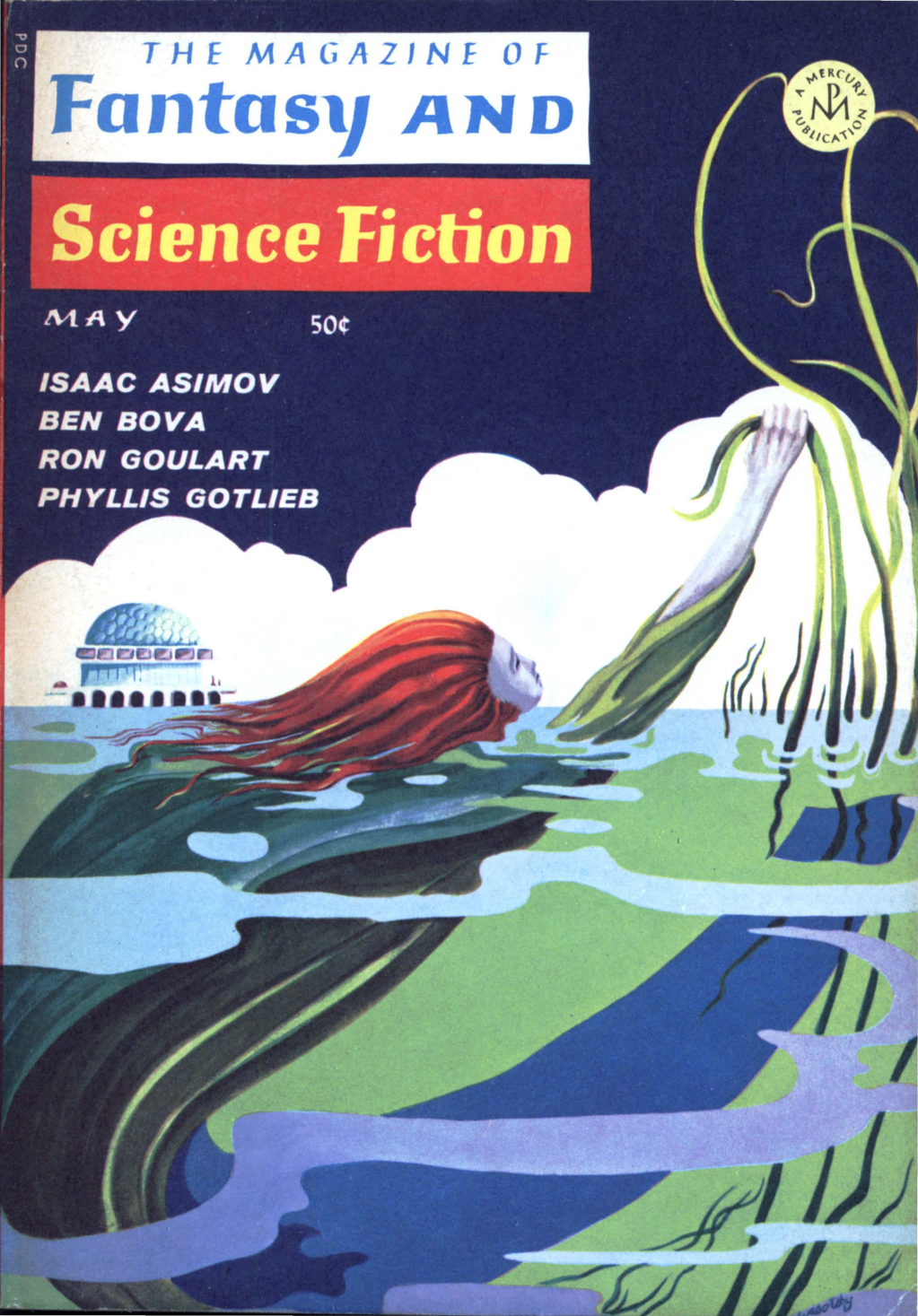

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Mrs. Gotlieb writes: "I was born and educated in Toronto (Master's degree in English at the University of Toronto) and have lived here all my life. My husband is Director of the Institute of Computer Science at U. of T., and we have three children." Mrs. Gotlieb has had one (non-sf) book out in Canada, and her poetry appears regularly in Canadian literary periodicals. In the U. S., she has had several stories and one novel (SUNBURST) *published—all science fiction. "I don't have much preference for one kind of writing over another," she says. "They all seem necessary to me, like vitamins." Her first story for us presents an impressively convincing picture of an alien (and diseased and dying) civilization. As equally compelling and effective is the relationship among the members of the heterogeneous observer team sent to aid them.*

PLANETOID IDIOT

by Phyllis Gotlieb

IT WAS PAST MIDNIGHT AT THE GalFed Observer Station on Xirifor II; mist swirled over the waters, and the huge float, which housed all Galactic Federation business on the planet, was tugging gently at its moorings. Ripples moved in silence against the timbers under the cool night winds. Inside, in the tank room, a hand turned up the cock on Vavvingru's sleeping tank and he quietly began to drown.

Water poured between the flared leaves of his lungbook, but he did not waken; although he had lost his external gills from disease, what was left of his internal system extracted the mixture of available gases he called air for half an hour; then it became overloaded, and he started choking.

He woke in noiseless panic, smothering in the familiar water, clutching at the clamp under his jaws, which normally kept his head above water level. His fingers, weakened by lack of circulation, could not loosen it. He twisted feebly, in a desperation of silence and terror. *Help!* his mind shrieked. There was no help, no way to escape, no way to make a sound. Nothing but death.

Across the room, in a larger tank full of the waters of a different planet, Hrufa stirred in her

sleep and woke. Without having to open her eyes, she knew everything in less than a second: Vavvingru was drowning, near death, someone had flooded the tank, she was far too large and heavy to climb over the edge of her own; the lock she always used would take fifteen minutes to operate and release her. Vavvingru would be dead by then.

She began to broadcast powerful impulses, soundless wordless siren blasts. If they had been audible they would have shattered eardrums and perhaps skulls; as it was the glass of her tank rayed with fine cracks like the craze on china, water wept softly down the outer sides; in the darkside seas all living creatures trembled in their mudbeds; the tp waves knocked the Solthrees out of their bunks; Thlyrrh in his sleepshell nearly fissioned then and there, and deep in the waters miles away the would-be killer stopped in midstroke: a blood vessel had broken in a brain whose veins were already distended with fear and guilt. He died as if struck by lightning; his body washed away in the current.

The Solthrees, Olivia Smith and Michael Faraday Berringer, came out holding their heads. They were less susceptible because they were non-telepathic, but the effect of Hrufa's blast was an instant migraine. Thlyrrh, who was a telepath, had become disoriented; he flowed into his workshell and came out haltingly.

Hrufa called, :Hurry! Shut off the water!: Like most telepaths and most reptiles she had no voice; she spoke telepathically.

They turned off the cock, climbed ladders to loosen the clamp and drag out the limp body. Water had been pouring over the edge of the tank, and they came down soaking wet.

"Why wasn't the overflow working?" Berringer asked.

:He turned that off too.:

"They aren't usually that bright." He and Thlyrrh held Vavvingru head downward and turned him over and back till the water ran off and the surfaces of his lungs were free to take air, while Hrufa watched them anxiously, swimming back and forth in her tank.

He was not heavy, and Berringer carried him into the lab and dumped him on the examining table. Thlyrrh extruded a stethoscope from his workshell and listened to the foundering heart.

"How is he?"

Thlyrrh could not answer, or even understand the question directly; he was incapable of picking up Solthree impulses. Hrufa, who had complete range, relayed all conversations with scarcely any time-lag.

:He says he sounds pretty soupy, but he'll live.: There was a faint undertone of amusement at the use of the colloquialism. Thlyrrh

had never worked with Solthrees before, and had not yet gotten over the novelty of their modes of thought and language.

"We better get you out of that busted tank," Berringer said. His head was still aching. Olivia Smith's face was white and drawn, and she was jittering in her bare feet on the cold wet floor. At least there was no need for long explanations: because Hrufa and her people were the most powerful telepaths in the Galaxy, they had all awakened knowing everything that had happened. "You can get some shoes on your feet, too," he added to Olivia, and grinned. "I didn't know you went in for long flannel nighties, Livvy."

She looked down at her sopping Mother Hubbard, flushed, and raised level eyes. "I'm also wearing fleecelined longjohns underneath," she lifted the dripping hem of the skirt a couple of inches, "but I didn't think you were interested, Berringer."

He raised his brows wryly, and she felt a small warm granule of satisfaction expanding within her. For once she had shut him up.

Hrufa came out of her tank conventionally by the lock, and surveyed the damage while it was draining. She was embarrassed. :I didn't mean to hurt anyone—the call was so startling—:

"Yeah . . . it was one of the Walashi, wasn't it, who tried to kill him?"

:Yes . . . they've been gradually moving closer to us since we came here.:

Berringer went back into the lab and stared down at the unconscious Xirifer. He felt sickened and weary. "If they'd done the job right we'd be a lot better off."

"Berringer!" Olivia had come in behind him.

"Don't be such a goddam nambypamby. Are we going to get anything done here as long as we've got him around our necks? Out of a whole planetary population we had to get this. Public Enemy Number One-and-a-half!" He jeered at the rubbery grey body, humanoid, flat-nosed, four-fingered, its flanks lined with the stubs and scars of what had once been magnificent branching purple-red gills.

:He broke their laws,: Hrufa said reasonably.

"The laws of one tribe!"

:They're as valid here as the laws of your England or your America.:

It was true. The Walashi were the largest, healthiest, most powerful tribe on Xirifor II. The others were scattered, broken, riddled with a crippling disease of the gills. The Walashi had kept themselves relatively free of the gill-rot by killing or exiling the sick and breeding heavily among the healthy. Vavvingru, a member of the Uwari tribe obviously suffering from gill-rot, had chosen in his

carefree and irresponsible way to seduce and impregnate a Walash woman. As a result, she was a prisoner and he an escapee in fear of his life. And the Walashi would kill their child as soon as it was born, because if it were male it would almost certainly be born with gill-rot, and if female, though it might not have the disease, would be a carrier.

The Observer team had come to Xirifor II to find out a great deal about gill-rot. This was almost all it had learnt, because by chance they had rescued Vavvingru; the Walashi were after his blood, and the forty-six other tribes, who had stopped their squabbling long enough to send up the call for help, were now too frightened to cooperate with an Observer team under fire by the Walashi.

Berringer muttered, "Forty-seven tribes, and the one thing they can agree on is that he's poison . . . well, we can't leave him like this; he'll dry out."

:He'll have to go back in the tank.:

"He'll be scared."

:They won't try again tonight. Tomorrow we'll set up a locking device.:

"What about you?" He waved a hand at the cracked tank.

:There is cement here; it can be patched up to last as long as we're here. And if not—I will put a little strain on my lungs. Amphibiousness has compensations.:

"Not many for Vavvingru." He was looking at her uneasily. Amphibian or not, she was also nearly eight feet tall, and must have weighed twelve hundred Earth pounds. Gravity here was lower than on Earth, but Hrufa was used to living four-fifths of her life underwater, and she would be uncomfortable. It had taken the Solthrees a long time to get used to the nervous creaking of floors under her weight. "We'll make you up a bed."

:I need the body.:

He brightened. "That's right. I forgot. I've been wanting to get my hands on one for a long time."

:No, no, Berringer! Not a Walash.:

"Why the hell not? What's the matter with that?"

:We're in terrible trouble with them already. The last thing we'd want to have them after us for is desecrating burial customs. The body has to be whole for the soul to go to Heaven.:

"You think that one's headed for Heaven?"

:He is to them. He's a hero.:

Berringer snorted. "Then why do you need it?"

:There's something I have to check. When I bring it in you can go over it externally, but no cutting.:

"You don't even know where he is."

:I know where he died.: The reaction came: a sense of pain, re-

gret, a breaking of law. Her feelings about the Xirifri were different from Berringer's. She had come to observe, and she had killed. :His people will also be looking for the body. I will home on them.:

She went to her cubicle for filters, and came out wearing them in the gill slits in the sides of her neck. Thlyrrh was a lump of protoplasm in an artificial carapace and could live anywhere as long as he had a suitable shell. But Hrufa and the Solthrees needed special filtering and draining devices set into their nasal passages to use Xirifor air and were supposed to avoid mouth breathing as much as possible. It was an uncomfortable business, and a lot of sighing and grunting had to be done by nose.

Hrufa was even more uncomfortable because she was the only one of the team able to find her way without direction in the seas of Xirifor as well as the air, and to take advantage of this ability she needed extra filters for the water.

As she was about to step out onto the dock, she bent double in a quick convulsive movement, and pain stabbed once more into the Solthrees' skulls. Olivia cried, "Hrufa, what is it?"

:A cramp, I think.:

Berringer shook his head and swore. "You gave yourself a shock with that blast in the tank. You can't go out like that. We'll have to give it up."

:I have to have the body . . . you'll see why when we get it.:

"Aah! I'll go out with the scuba. You can direct me."

:You'd be too slow. They know they can't touch me, but they won't be afraid of killing you.:

"Why? With those blasts of yours you can cover half a planet—"

:Not again, Berringer. I won't kill again, even for you.:

"I never knew I was that expendable," Berringer said. "All right. What are you going to do then?"

:Send Thlyrrh.:

"Him? He's heavy as lead—and if water gets in those joints—"

:He is not as heavy as he looks, and,: a flicker of amusement, :believe me, he won't rust.:

Thlyrrh had few preferences or passions, but he liked to do things properly, and when he had learned that he was to work on a planet of humanoids and that other humanoids were included in his team, he carefully chose a humanoid form for his casing: the result was as if a composite of Phidias' *Apollo*, Michaelangelo's *David*, and a Picasso saltimbanque had been executed in silver and gold by Benvenuto Cellini. He was splendid, engraved, curlicued. He completely overawed the Xirifri, and even the Solthrees. But he was astonishingly light and swift, did not rust, and he was at home in any gas or liquid and needed no scuba.

He moved out mercurially, leaped from the dock, and was gone.

"What is it? Where—" Vavvingru had wakened and staggered to the lab door.

:Nothing. A disturbance,: said Hrufa. :Get back in the tank.:

"No!" His eyes widened, his arms flung out. "They're trying to kill me!" His grey skin, already crinkled with drying out, paled. The words twittered with fear in his mouth. "I can't go back!"

:Get back in and sleep,: said Hrufa. :Sleep.:

He got back in and slept.

"Well, he doesn't kick up," Berringer said wearily. "I'll have to admit that. I'd hate to have to try keeping a Walash with whole gills and in his right mind shut up here. At least Vavvingru isn't trying to kill anybody. It's the only thing in his favor."

:I want more than that from him. I want him to become a way of bringing these people together.:

"Him? That's impossible!"

:We must make it possible. Look.: She pointed to a chart on the wall. With exaggeration, it might have been called a map, for it was ruled off into latitudes and longitudes, and was supposed to represent Xirifor II. But since the planet was almost completely covered with water, it had no geographic markings except a few faint dark patches that represented shallows or ready marshlands; superimposed on these were forty-seven cloudy shapes painted in light washes with fuzzy outlines. These shapes represented the tribes, and many of their positions were already out of date.

:Look, there are the Walashi, numerous and strong. They are healthy, they have real knives to fight with, when the others have only broken shells; they don't need us, they don't want us. And there are the others, weak, sick, and scattered. They don't want Vavvingru either, but they are too afraid of the Walashi to allow us to help them now. It seems hopeless. . . .:

"And of course," said Berringer, "there's the pearls."

It is better to believe, and probably the truth, that GalFed would have come to the aid of the Xirifri even if the survey ship had not discovered that the seas of Xirifor produced oysters that secreted pearls, huge, baroque and blue, more beautiful than any ever known before. Whatever the truth was, the pearls at least gave the peoples of the planet something to bargain with, if they could ever get together to make a bargaining unit.

:The pearls are not our business,: said Hrufa. :These people are diseased and need help. No one can ever hope to eradicate a disease in forty-seven scattered tribes who group themselves in little knots in the far reaches of the planet and migrate as the seasons or their fancies move them.:

"Especially if forty-six of them are scared silly."

:Especially. They have to be unified somehow. Vavvingru might possibly be made to serve as a kind of focal point—even if they unify only in a desire to kill him.:

"Yeah, sure . . . and then they'll be a hell of a threat to the Walashi. And then suppose the Walashi decide to take their anger out on us? You don't have to worry, you're invulnerable—and you won't kill to save our lives!"

:We can't worry about that yet.:

"I'm damned well worried about it. I like my skin. You can play with dynamite when you know *you* won't get blown up!" He stalked into the kitchen and slammed the door.

She stared after him, still half-sick from the cramp, and pondered sorrowfully over the complicated emotions of alien peoples.

Berringer opened and slammed locker doors. "Where the hell's the coffee here? Doesn't anybody ever put it back where it belongs?"

Olivia, having dried herself off and gotten dressed, came in quietly and found the coffee in the place where it was usually kept. She filled the pot with water.

He glared at her. "I guess it doesn't bug you, having an eight-foot lizard ordering you around."

"No," she said. "I like her."

"She doesn't give a damn for any of us, you know."

"She's completely alien, so why should she? I don't care."

He gave her a shrewd look. "When nobody cares, things don't hurt that way, huh?"

She plugged in the pot and turned to him. "Berringer, I came out on this trip quite willing to like you. You made sure that didn't happen, and if that's the way you want it, suppose we leave it that way."

Hrufa's thought chimed in their minds. :You two had better get some sleep. Thlyrrh won't be back for a while.:

"I'm very wide awake, and I don't need your hypnosis," Berringer said. "Just keep out of my mind."

Hrufa shielded herself from Berringer's mind and opened to Olivia's. Olivia, getting down cups and saucers, caught a telepathic glimpse of Hrufa unrolling a thick woven reed mattress on the floor by the tank. :What is this in his mind, *too much like my mother?* It bothers him.:

Oh, Olivia said silently, *I never thought of it before . . . a large female. You make him feel like a helpless little boy. Uncomfortable.*

Amusement. :That was never my intention . . . there is no end of complexity working with other-worlders.:

It's just as hard for me, with him . . . and he can't stand having his mind read.

:As long as he doesn't break

GalFed law, his thoughts are not my business. I can't even understand their context.:

He knows that and doesn't believe it. "And we haven't succeeded here," she said aloud, unintentionally.

"What did you say?" Berringer asked.

"Nothing. I was thinking aloud."

He grunted. "You don't have to tell me about failure." He poured himself a cup of coffee, took it to the table, and drank.

She stayed at the counter and watched him, hunched over the cup. She had had months of his foul-mouthed bitterness, and it was enough. She was near breaking.

And she had begun that way. An orphan, passed from relative to relative, she had become an alien-anthropologist who knew the most intimate habits and customs of a hundred peoples on a dozen alien worlds, and nothing at all of her own. She was of medium height, with silky brown hair, grey eyes, and a pleasant fresh-skinned face. She was also thirty-two years old, and shortly before setting out on this trip she had joltingly awakened to the fact that there was a terrifying lack of human contact in her life, and unless something crucial happened for the good, things would go on this way until she died.

Berringer's story was equally simple: he had begun with everything, and because his restless strength had had nothing to push against, he had collapsed from within. He was still bright, still good looking, with his fair thick hair and his narrow face a little marred with bitterness, and in a few years he would be middle-aged. "You know how I got here?" he said suddenly, as if he had been reading her mind, and she started. "I got here because my family knew where to push and where to pull, and they wanted like hell to get rid of me—and when I come back with the whole thing bitched up that'll be just about what they expect, huh? And they won't be disappointed."

"The First Aid's supposed to be for Xirifor, not you, Berringer." It was all she could think of to say, and she went back to her cubicle to ruffle papers and sit out whatever waiting was to be done.

Hrufa found their unhappiness an irritant to her nervous system, but she did not know how to make Solthrees happy, and it was not her concern. She was there to provide instant communication for all parties, and if that was not enough, what was?

It was two hours before Thlyrrh came back, and Berringer spent the time draining Hrufa's tank and spraying clear quick-drying cement over the outer surface. He was more tired than he had admitted; he had had only an hour's sleep before being wakened by Hrufa's

alarm, his head was still ringing, the inside of his nose ached from three months of filters. And the deepest source of discomfort—day by day he could feel panic rising in himself with the sense of impending failure. He wanted success very badly and hated the vulnerability the desire brought with it.

:Thlyrrh?: Hrufa got up from her pallet suddenly as the tank was refilling; Berringer turned off the cock and followed her out to the dockside.

Thlyrrh rose from the waters weed covered, a silver Triton. The body of the Walash was slung over his shoulder.

:Put him on the dock for now, we'll bring him in later. Here . . .: She spread the body out on the dock and pulled at the tough woven reed belt around the waist. It broke and she jerked it free and handed it to Berringer.: Look!:

He blinked in the cloud-covered dimness. There was a dagger stuck in the belt. "So it's a knife. I knew they had knives. Everybody knows that."

:Have you read the survey ship's report? 'The Walashi have standard knives of wood and metal, but the other tribes make use of broken, shaped shell fragments . . .' That is all that was in the report. Perhaps the team was too preoccupied to look further—or perhaps they were too stupid.:

"Oh . . ." Berringer was beginning to catch on. He turned the dagger in his hands; it was very old, blade thinned down to the concave, handle worn down from the tang and pins. By GalFed standards it was very primitive, but more than sophisticated enough for Xirifor.

:Of course. Where on this planet do they have mines to find or forges to shape this metal? Where do they have the trees for this hardwood that has not rotted during many years under water?:

"I'm damned if I know."

:The Walashi will be coming for the body in an hour. Perhaps they can tell us.: Thlyrrh picked up the body. :You can look it over in the lab. But there's to be no dissection.:

"How about a microtomic section of gill tissue?" Berringer grinned. "I don't think the lack of that will keep him out of heaven."

:Nothing more, then . . . it's strange, but I seem to have in the back of my mind the consciousness that a ship from another world crashed here a long time ago.:

Berringer shook his head. "Now I've got it too—but I must have gotten it from you. Nobody told us that. Nobody's told us anything."

With his hour he did the best he could to add to his meagre knowledge.

Xirifor II was a small cloud-covered planet revolving around a

blue-white star. It had not many life-forms, and their evolution would remain a closed book for a long time. The people were mammalian humanoids, smaller and lighter than Solthrees, who could breathe air, but were much more comfortable underwater making use of the huge external gills that lined their flanks. They were low-grade telepaths; above water they could speak a harsh primitive language of whoops and whistles that took many words to express simple thoughts; the development of their spoken language was hampered by the stiffness of their tubular mouths, roofed with blunted spines for teeth and floored with leathery narrow tongues that were too inflexible to produce many sounds. Since they could not stay above water very long because their skins tended to dry and crack even in their cold damp air, it was a wonder that they could speak at all. They came up on the grassy hummocks to perform religious ceremonies, and without this odd custom they might altogether have given up the air, with its necessity for lungs and possibilities of language, and developed their telepathy into a more powerful and subtle faculty.

Their social organization, which was Olivia's main concern, was another mystery, but although she was annoyed because she could not get near the Xirifri, her annoyance was caused by mere frustration and not by the tantalizing sense of marvelous discoveries just beyond reach. She knew that except for the Walashi, the population kept themselves in small tribes and bred endogamously within them. Olivia assumed they followed classic primitive tribal structures, and whatever probes Hrufa had been able to make in a limited way had confirmed the supposition. The only time the Xirifri had tried to make a more complicated unit was when they had banded together temporarily to ask the survey team to send help.

Whatever possibilities of help there were for gill-rot rested largely with Faraday Berringer. His was a hybrid, formless specialty forced into being by the impossibility of sending out a team of a hundred precious specialists and a computer twice as heavy as a GalFed starship. He was a non-specializing biologist: he was to gather data to be sifted and analyzed back at GalFed Central till it dropped into intelligent and intelligible patterns.

On Xirifor II there were not enough data.

None they could get from the Xirifri because they had made the stupid mistake of saving Vavvingru's life within the first hour of coming down in the spaceboat for a look at the planet. He had been lying gasping on a hummock, half dried out, almost completely

starved, hand clutching a wisp of tough seaweed he had been trying to gnaw on; the remnants of his rotten gills were hanging in shreds and tatters. Afterwards, Thlyrrh, the all-purpose brain-machine combination, had to excise them. They had all agreed that they had to save him. But the information! Berringer, the non-specialist, the smatterer who was forced always to accept crumbs, was deprived even of those.

:The Walashi are here,: said Hrufa.

"All right," Berringer said. Thlyrrh picked up the body and followed him out to the dock.

Thlyrrh was another one Berringer would have liked to know about. He had travelled with some strange types, but Thylrrh took the prize. When he asked Hrufa what Thlyrrh's function was in the team, she had answered, :Universalist.: The definition was somehow unsatisfactory, but perhaps it was the true one. The only acts he had seen Thlyrrh unable to perform were purely animal ones. Berringer had watched him dissecting the small animals of Xirifor with an envy that was almost love. If they could only have kept the body . . .

He felt chilled. There was something angry in the air about him, and he wondered if the Walashi had caught his thought.

Hrufa and Olivia were waiting on the dock. And the Walashi.

If he had thought of Thlyrrh as a Triton he was mistaken. The real sea-lords were here, three broad, powerful, blue-grey mermen standing against the first paled cloud of dawn, purple gills glistening with slime and draining streams of water; Vavvingru was pathetic compared to them.

Thlyrrh put the corpse down at their feet. They knelt to examine it. If they realized it had been tampered with, they could find no evidence. But they were feeling around the dead man's waist, and even in the dim light it was obvious there was neither belt nor knife there. One of them raised his eyes to Hrufa. Their pupils were huge, and thinly rimmed with silver.

:Is there something missing?: Hrufa asked.

There was some embarrassment in asking the enemy to give back one's weapon. He said sullenly, "The knife."

Hrufa held out her hand, and Olivia took the knife out of her pocket and gave it to her. The Walashi stood up and their leader reached for it, but she did not offer it to him.

:You Walashi are strong and healthy—you have knives, and you do not need a cure for the gill-rot. You do not want us here.:

"That is true. You came here for pearls, and you will never have pearls."

:We came to find a way to heal

the sick. The pearls are the concern of others. *I* need no pearls.: Her talons were already mother-of-pearl, her eyes topaz, her scales like shot silk. The morning light, gathering strength suddenly, caught on her surfaces and made them a marvel. :You didn't make this knife. You could not, because you have no trees, no forges. Where did it come from?:

A premise underlay the conversation: the Walashi were not forced to wait around like guilty schoolboys and answer questions. They were free to go. But they were terrified of Hrufa—and they wanted the body. "We don't know. Our fathers give us our knives."

:That's true. Now why do I have it in my mind that an otherworld ship crashed here many years ago?:

The three Walashi gave startled jumps, simultaneously, like a trio of marionettes on one set of strings. It was clear that the idea had never entered the forefront of their minds, and equally obvious that they had harbored it in an unconscious memory, perhaps inherited, like their knives, from their fathers.

:Yes . . . I understand,: said Hrufa. :And you don't know what ship it was . . . because you have no written records.:

"Then you will not find out," said the Walash. Hrufa's mind was impenetrable to him in its complexity, but even though he did not understand anything of her aims he was glad to be able to balk her. "Now that you know everything we know you will let us leave with the body . . ." But they kept standing there. They wanted the knife, which was perhaps half the dead man's family treasure.

:Just a moment,: said Hrufa. She gave the knife to Thlyrrh, whose hands touched it with small ringing sounds. :No, the maker's name has worn off and that will make it harder . . .:

The Walashi blinked, thin membranes flicked over their eyes, as Thlyrrh extruded sensors like pseudopods from his body and turned the knife among them. Hrufa relayed: :The metals of the blade are common over the Galaxy, but the wood . . . is from the *zul* tree grown on Barrazan II . . . half the trunk is under water—like your swamp cypress, Berringer?—that is why it lasts so well here.:

The Walashi blinked at her, anxious only to be gone, but she was not finished. :But *zul* is sent to . . . Chlis? The moon of Barrazan IV? . . . to be made into—: she looked at Thlyrrh, :—ah, second quarter Galactic Era 7984—souvenir knives from the Great Forges of Chlis?: She was grandstanding a bit and rather enjoying it. :And Barrazan IV still exports those knives throughout the sector . . . so we have found the source.:

"That has nothing to do with us—"

:One moment longer. Thlyrrh, the Barrazani registry . . . starships lost without trace out of the Yskeladar sector—Coma Berenices to you Solthrees—: and Berringer was beginning to understand what the term *Universalist* meant. :The *Bexancir,* you think? The *Bexancir* of Barrazan . . .: She faced the Walashi again. :Gentlemen, it seems that starship, the first your people ever saw, I imagine, crashed here several hundred years ago . . . loaded with, among other things, souvenir knives from the Great Forges of Chlis. What happened then, I wonder? Did you Walashi find them first and make sure no other tribes got them? Did the ship sink first, or did you find a way to tear it apart? And were there any survivors on that peaceful ship. . . ?:

The huge black eyes of the Walashi burned cold with fury, and the leader crouched down to pick up the body and be gone.

:Are your thoughts so full of guilt that you have to shield them?: Hrufa asked.

But the Walash did not move to pick up the body. He leaped from his crouch straight at Thlyrrh, who fell over in surprise as the knife was grabbed from him; hefted it swiftly, flung it at Berringer, and leaped into the sea, leaving the others to snatch up the body and follow. And they were gone.

:I had no idea they would be so handy with knives in the open air,: said Hrufa.

"Is that all you have to say?"

:I'm sorry, Berringer. I didn't mean for you to be hurt.:

The wound was not serious; the knife had taken a stitch in the flesh of Berringer's upper arm. Thlyrrh applied antiseptic, sprayed with skintex, and covered it with a thin elastic bandage.

"I can't figure why you were fishing for all that information. What's the use of it?"

:I'm not even able to explain that myself. But I'm sure it's important.:

Berringer watched Thlyrrh's gravely beautiful face hovering over him, a reality of cold metal, and felt an appalling sense of desolation. There was not much he cared about in life, but none of what he wanted was here. He despised Olivia Smith, feared Hrufa, and found no sense of personality in Thlyrrh. Worse than that, there were people here actively hostile to him, and the pain of his wound reached the center of his being.

"You don't know, and I'm hurt . . ." he said tightly. "You had no right to provoke them into being angry enough to attack me." Full of pain and self-pity, he had forgotten what he had said before about being namby-pamby.

:Here is a pill to make you feel better. That is true, but they have

no right to let a world die because they want to hold on to a few square metres of power.:

"Evolution would have done that anyway."

:Evolution works without intelligence or morality . . . without justice or mercy. I—I am arrogant enough to want to reach for them . . .:

It was a carefully kept secret from Michael Faraday Berringer that Hrufa liked him very much. In a good mood, with his violent words and gestures, he eased and soothed away her constant sense of loneliness and distance.

She turned off the tp recorder into which she had been dictating the log, shifted her stance on the broad base of her tail, and stared out of the office port. She was feeling particularly depressed and lonely. Unconsciously or not, justifiably or not, she had broken rules, killed a man, disturbed half a planet with her telepathic alarm. And she had allowed Berringer to be hurt. And that cramp, that pain, had terrified her into weakness. She should not have come out on this trip. There had been failures and mistakes before, but she had never lost her equilibrium to such a degree. There was no one here she dared share her feelings with; no one who, in her terms, could comfort or excuse her.

There was certainly no comfort in looking out at Xirifor II. Nothing there but grey wastes of marsh, a blank, almost featureless surface. As far as anyone knew, sunlight had never penetrated the cloud layer during the millions of years of life on the planet. The concept *sun* did not exist in Xirifer thought; Hrufa had sometimes been tempted to give Vavvingru a telepathic picture of his blue star, but she did not want to risk driving him mad. Personally she found the flat grey spread of barely shifting cloud powerfully oppressive.

Her race had to cope with a highly organized nervous system coupled with a slow, dark underwater life. But above water there was more than enough compensation: mornings on Khagodis the sun flung itself up like a brass gong, and the sky flared deep blue in the thin atmosphere, starry at its peak all day long. Sun blazed over harsh mountaintops blasting fire and lava that rained down steaming into the waters around them.

Looking out at the wet flats, she realized why she liked Faraday Berringer. With his skycolored eyes, suncolored hair and violent gestures, he reminded her a little of the climate on her world.

"Hey! Hey!" Vavvingru called out from the other room. "I'm hungry! Isn't anybody going to feed me?" She turned away from the dispiriting view and went to him.

He had hooked his elbows over the edge of the tank. "I'm starving.

Doesn't anybody care about me?"

She took a block of dried weed out of a locker and tossed it into his tank to soak. He chased it around gracefully underwater for a few moments; the loss of his gills had not hampered his swimming.

When he was nearly through eating, she gave him a mind-picture of the Walash knife and asked, :What do you know about these?:

"Nothing." He hooked a strand of weed off his chin with a finger and pushed it into his mouth. "The Walashi have them. What else?"

:Did you never wonder why the Walashi have them and you not?: She asked the question without hope. He wasn't very bright.

He looked at her blankly. "We have no knives, that's all. We are not strong enough to take them from the Walashi."

:*You* were strong enough to take a Walash woman.:

"If I had had a knife I would have been stronger yet and they would not have driven me out of the water."

She gave up. As she was about to head back to the office, the pain caught her again. She fought for control and pushed down hard on the rise of terror, to avoid disturbing the Solthrees. But Vavvingru was a telepath, and she sensed his huge rimmed eyes staring through the dim waters. She turned. He had pulled himself up to the edge of the tank again. "You hurt?"

:I have been out of the water too long, and the gravity, I think . . .: She dragged herself into the lock of her tank and pulled the switch.

"There is something else."

She could not hear him through glass and running water, but she knew what he meant. Weary and in pain, she said, :I am gravid.: There was no use avoiding that any longer. What was more, she had miscalculated the time, so that the mission, which should have been almost open-ended, would now be sharply delimited.

"Ah, you will have children!"

:Maybe . . . maybe not.: On this planet? On Xirifor II? She suppressed the thought, to spare Vavvingru's feelings. But his mind was on other things.

"If you become sick and weak, who will care for me? The Solthrees don't like me, and I'm afraid of that one who shines."

:Ah, Vavvingru, you must try to become a man.: The waters surged around her, the pain eased; she felt herself becoming drowsy and allowed herself to drift.

"A man! How can I become a man? You have cut off my gills. I cannot live in the water because I cannot breathe, and I cannot live in the air because I dry out. Is there a place for me between the air and the water? You will have your children! You are strong and powerful and no one stops you from saying what you have to say

and doing what you have to do. But I am a thing whom everyone despises, my woman is a prisoner, my child will be killed by the Walashi. There is nothing left of me but this thing the Walashi hate and my people laugh at . . . I was more of a man when I was dying on the hummock with my gills rotting, where you found me."

:Vavvingru, you are right, and I beg your pardon. Do what you can for us and we will do what we can for your woman and child as well as yourself.: She needed rest, she drifted, sank toward sleep. Before she went all the way she realized that her concern with Vavvingru had masked her awareness of trouble elsewhere.

Olivia Smith did not suffer more loneliness on distant planets than anywhere else. She had always been at a distance and she was no further away here. She was always a stranger, even to herself; she looked different to herself every time she looked into a mirror and was always vaguely surprised when anyone recognized her.

Tired and yet unable to get to sleep, she leafed her meagre notes without grasping what she was trying to read, and ran her eyes along the titles of her bookshelf without finding help there. She looked out of the port and saw the marshes of Xirifor stretching in endless desert.

There was a knock at the door; it opened and Berringer came in.

"What is it?"

His eyes were bleared, he was still wearing the shirt stained from his wound. "I—I thought . . . I wanted to ask . . . something, I don't know."

"You better go rest."

He stood there, rubbing his head, puckering his brows. "I need a drink."

"You know I haven't got anything here, Berringer. I'm not a drinker."

"Yeah, I should have remembered . . . you're not much of anything."

She pursed her lips and waited for him to go.

He came a step closer; his eyes flicked back and forth. "There should be something I can . . ."

Her voice turned a little shrill. "There's nothing I can do for you! Please go and let me have a little rest."

Perhaps because of the pill he had taken, he was having trouble focusing his eyes. He took another step. "Nothing you can do for me, Olivia? Maybe . . ."

She stood up slowly and faced him. "Please go away," she whispered.

He grabbed at her shoulder. "All this way and there's nothing? Nothing?" He raised the hand of his wounded arm to her other shoulder, broke into a sweat with pain, and dropped it.

She tried to back away. There

was hate and anger in his eyes, even his sweat smelled of it. "Why are you coming to me now after all the things you've said to me all these months? What do you want? If it was really me you wanted, I—"

"What?" He showed his teeth. "What, Olivia?"

"Nothing! You hate me and you're angry at Hrufa, and everything's a mess here!" She was shouting. "You can't come to me that way and ask for anything! Now get out!"

"And if I don't?"

He was half silly with the drug and the pain. She could have pushed him over with one hand, but the idea of hurting him was terrifying, and the force of his senseless hostility paralyzing. "Please, Berringer!"

The door opened. Thlyrrh was standing in the doorway.

Hrufa said from her tank, :Go to sleep, Berringer.: He dropped, and Thlyrrh caught him.

:Put him in his bunk. Now Olivia, please come out here.:

She went to the tank, face covered with her hands. "I never—I never talked to anybody like that before."

:Don't worry about it. Please calm yourself and listen. Something has come up that makes it necessary for us to finish our work quickly and go home. I'll explain later, but first we will sleep while Thlyrrh stands guard, and I think we will all feel better after that. But you must treat Berringer as if nothing has happened and try not to be angry with him, because we need him. Can you do that?:

Olivia wiped her eyes. "I hate him. Them. All of them."

:My dear, it would be a terrible thing if you loved every race but your own. Now we had better get to sleep.:

Berringer sat up, tried to stretch, changed his mind, blinked his eyes open. He noticed the darkening of the sky through the port, then remembered what had happened, and shuddered.

:Berringer,: Hrufa called. :Please come out here. We have to talk.:

Berringer staggered out to the tank room. He thought he must look hangdog. He felt hangdog. The dining table had been set up near Hrufa's tank and there was a cup of hot coffee waiting for him. He sat down and began to drink without looking at Olivia. After a moment he realized that Hrufa was still in the tank. "What's the matter? Are you sick?"

:I am afraid I appear to be gravid.:

"What? You're going to have a baby?" He blinked. "Babies?" he asked tentatively.

:We do have them, you know . . . yes, Thlyrrh? . . . Thlyrrh tells me I should learn to reproduce by fission, but I'm afraid there's not enough time.:

"Why did you come out here in that condition?"

:I wasn't altogether sure.:

"How many?" Berringer gulped more coffee, to clear his head.

:Sixteen at present count. Seventeen, perhaps.:

"Now?"

:No, no! I hope not. Not for a while.:

"You want to get home in a hurry . . ."

:Yes . . .:

"How are you feeling?"

:Not very well. I think I have been out of the water too much.:

"Well, we don't have to risk our lives, it's not in the contract—though it seems to come up from time to time." He rubbed his injured arm. "Why don't we pull out now?"

:No. I can't do that.:

"Why? I'm not asking to fail—but the way things look now we haven't a hope in hell."

:Because, if . . . Berringer, my people have a low birth rate and a high moral sense . . . I suppose they go together. I have already aborted twice. If it happens once more I will lose my seat on the Council, and my husband will be obliged by law to leave me and take another wife. But if we leave now it will be on my responsibility, and GalFed will suspend me for neglecting my duty. I might be able to bear it if one or two of those things happen. If they all happen, I will have nothing.:

"You'll keep us here and risk our lives to save your own pride!"

:Yes, Berringer. I want to keep something of my pride. Don't you? And they need us here.:

"Yeah, like a hole in the head! And all GalFed wants is their rotten pearls."

:That's not what I want. Forget my pride. They're sick, and I hate sickness. I hate those rotting gills. I want them to be whole and well. You are like the Walashi, telling me I came for pearls. We may fail here, but no one can blame us if we've done everything that can be done. If we leave without trying, no GalFed team will be allowed here again.: She rose and came to the front of the tank, pressed her pale scaled palms against the glass. :I can't keep you here if you think there's too much risk. If you and Olivia and Thlyrrh vote to leave, we'll go.:

He leaned his elbows on the table, ran his hands through his hair, and said nothing.

"I'll stay," Olivia said quickly.

"Sure you'll stay!" He flung out a hand. "What have you dug out of the muck that's so precious you have to dig for more?" He ticked points on his fingers. "They mate endogamously, practice polygamy when gill-rot upsets the balance of the sexes, so what's new? Oh yes, they string their dead with pearls and weigh them down with rocks—and they say their prayers in the open air. Except for that you

could find it all in seventy-five thousand monographs on the South Seas!" He turned to Hrufa and stabbed his chest with rigid fingers as though they were knives. "I've got bits of gill tissue, I've got smears of I don't know what, washed around in the sea for hours. I've got water, soil, and air samples, plant and small animal specimens—composition in the range of a hundred other planets. At GalFed Central all this will do is move somebody's statistic up or down a hundredth of a percent—that's all. And Hrufa—why are *we* here, Olivia and I? What do you need Solthrees for? I can see your function, but why do you need us? Thlyrrh can do everything we've done, probably better. Why?"

:Thlyrrh answers questions, but he does not ask them,: said Hrufa. :And I am neither a biologist nor an alien-anthropologist. Olivia votes to stay, and Thlyrrh says it does not matter to him . . . you have a strange expression in mind.:

"Yeah. It's no skin off his nose. And I mean that literally." He shrugged. "Okay. That's it."

:All right. Now bring your notes and we will see what we can put together about this disease.:

He got them. "Here." He began to flip through notebooks spotted and stained with the waters of Xirifor. "All the parasites, bacteria, whatever life-forms I found on Vavvingru's necrosed gill tissue can be found on other plants and animals here—and they don't seem to be affected. That doesn't really mean anything. But I took slime smears off the cadaver's gills, and the same stuff is there."

:Thlyrrh? Thlyrrh says there is what appears to be a mild antibiotic in healthy gill slime.:

"I know, and it's missing in gill-rot cases. It seems to disappear as an effect of the disease—or maybe it's one of the causes. I also got a little blood out of that Walash, to compare with Vavvingru's, and there don't seem to be any significant differences. There could be a virus we haven't the equipment to test for—"

:GalFed does.:

"Yes, but they can't test for metabolic imbalance from these samples, or circulatory failure, or several diseases in symbiotic interdependence, or chemical poisoning, or dietary deficiency, or ecological change. Or heredity. You have to give tests to healthy people and sick people, at least by the dozens if not the hundreds, ask thousands of questions, dissect bodies. Can you imagine the Walashi agreeing to controlled experiments—or even simple observation? Even if we could get all that, from what we've been able to observe the disease is shapeless. You can tell if a baby's going to get it, because his gills are slightly deformed at birth—that is, if we

can trust what Vavvingru's told us, and even when he's truthful his memory's no help—but even if a baby's going to get it, he can get it at any time of life till he's an old man—like diabetes. Sometimes women get it, but mostly not—like hemophilia and color-blindness. Vavvingru's mother has a brother and nephew in pretty bad shape, though she and the daughters are healthy enough—but they could be carriers. He has no brothers and his father hasn't got it—he might still get it. And the kid he got with that Walash woman . . . if it's a boy he'll almost certainly be born with some sign of it, and if it's a girl, probably not. Why?"

"That sounds hereditary," said Olivia.

"Maybe. But there are plenty of non-hereditary specializing diseases on Earth. Gout attacks mostly men over forty. Anybody can get German measles, but it's dangerous only to three-month embryos. There's a kind of allergic reaction to streptococcal infection that gives red spots on the shins mostly to young men under twenty-five. I forgot, I should add allergy to the list of possibilities."

:But we don't have to pinpoint the cause. Only gather data.:

"I'm trying to tell you that if we don't get further than this, GalFed won't be able to do anything with our data. I'm nowhere. I've chased Xirifri in scuba till I get the bends every time I think of them. I've asked a dozen tribal chiefs either to come here or let me come to them, and all they do is jump in the mud and disappear."

:Then GalFed will have to work with what we can bring them, and they won't blame us.:

But Berringer was obsessed with the spectre of failure. "Having to give up that body . . . I wish . . ."

Hrufa gave him a swift mental picture of five thousand Walashi converging on the Observer float with sharp knives, souvenirs from the Great Forges of Chlis.

"I know . . ." He turned his gaze reflectively toward Vavvingru's tank. Vavvingru, who had been resting his arms on the corner rim and watching them with interest, blinked once and slid back into the water, swam to the farthest and darkest corner he could find, and crouched there.

"It's all right, Vavvingru, I won't touch you." He shook his head. "Can't even tell the difference between a wish and an intention. That's the biggest obstruction of all. They're stupid."

:Limited, Berringer.:

"Yeah."

:It's clear we won't find out much about disease mechanisms without a specimen—but then even one wouldn't be enough. Still, you could find out something about heredity with statistics, couldn't you?:

"Maybe, but I'd have to question a hell of a lot of people . . . and in the end it'd still come back to the—uh—specimen."

:Forget your specimen for now.: Vavvingru slowly crept out of his corner and resumed his perch on the rim. :If we could bring people here by one ruse or another, without harming them, I'd be able to gather the information you need. You might even be able to prove heredity was not a factor if you had enough data.:

"With what I know of genetics?"

:You have books.:

"A few basic ones. Non-specialists' books. Even the simplest genetic ideas become sophisticated very fast as you go along . . . I'm not even sure the genetic laws we know apply here."

:They apply to nearly all the life-forms GalFed has discovered—the Crystalloids are an outstanding exception but even they have their laws.:

"You're not giving me much of an out."

:You can't afford one. We'll have to probe Vavvingru again . . . with his memory and intelligence what they are, I'm sure there's a lot of scraps of information we've missed . . . he has not much of a faculty for synthesizing his knowledge into new patterns.:

"He had one new idea, anyway—to mate with a Walash woman."

:I'm afraid that was sheer stupidity.:

"Limitation, you mean," said Berringer.

:*You* have no trouble with your memory. Now—wait! Be still a moment, quiet . . . there's someone coming here . . .:

They sat still and waited. Berringer and Olivia questioned each other with their eyes.

:No. Please try to blank your minds.:

They tried, but shielding was a faculty that came only with telepathy.

:Now I have him. Thlyrrh!:

Thlyrrh ran out to the dock, and a few moments later came back pushing a dripping Xirifer whose arms he was holding behind his back in the grip of a single silver hand. At a gesture from Hrufa, Thlyrrh let him go. The Xirifer glared at them and rubbed his hands, wealed purple from the press of the metal fingers.

"You don't give up easily," said Berringer. He did not know enough Xirifri to distinguish them, and he wondered if the face should be familiar.

:No, he is a Walash, but not one of the ones we've met.:

The Xirifer stared at Berringer and gave a jerk of the head that translated into contempt. "You are the man who likes to cut people up."

"Only when they're dead," Berringer said pleasantly. "So far I'm

the one that's been getting cut up. I'd like to have a turn at it."

:Wait till I get out of the tank first, please. I want to ask some questions.:

"Will you ask Thlyrrh to take specimens while we're waiting?"

A grim amusement. :Go ahead.:

Berringer grinned and cleared an area of the table by pushing crockery aside. Thlyrrh wrestled his prisoner down and took the few smears and scrapings he could. By the time the Walash was let up, sputtering with rage but unharmed, Hrufa was out of the lock.

She looked down at him and he backed away, fetching up against Thlyrrh, who pushed him gently forward again. :I believe the Walashi have made some plans, but I'm not sure . . . he's shielding very hard.:

"They got smart," said Berringer. "Can you force him?"

:Not without brain damage.:

The Walash, sputtering now with fear, cried, "When my tribe finds out how you attacked me, took my flesh and blood—"

"They'll know you're a liar. They're telepathic too, aren't they? All I got from you were some loose skin cells and a half a drop of spit —no matter what kind of magic you believe in they don't make a very powerful juju." He said to Hrufa, "You don't have to tell me you're not going to break his mind open to get at him, so what are we going to do?"

:I don't know . . . we could wait till he gets tired, but that would take far too long.: She stood there looking at the Walash.

Vavvingru, who had been watching the prisoner's humiliation with active enjoyment from his perch on the corner, said wistfully, "Things were a lot better when we were all together."

They turned gaping faces up to him. "Say that again!"

"Things—"

:Of course they were all together! The tribes! There's hardly any difference in their skin coloration . . . so it can't have been much farther than . . .:

"Hrufa!" Olivia cried. "He's getting away!" The Walash had crept out of the room and was heading down the dock for the open sea.

:Thlyrrh!: She turned back to the tank. :But the cosmic radiation level is low . . . and the chances of mutation aren't—Vavvingru! When were they all together?:

Vavvingru blinked. "I didn't mean all together in one tribe . . . the tribes lived closer, mostly in one place where the food was better, and . . . and . . ."

:And married into one another . . . .?:

Olivia asked, "Where is that going to get us?"

Thlyrrh came back with the struggling Walash who was howl-

ing in terror, certain that he was to be killed this time. Hrufa paid no attention. :Vavvingru! What made them stop being together? When was it?:

Vavvingru gave her a stare of utter vacuity. "How do I know? It was before I was born. Long before . . ."

The Walash howled, "If you do not let me go my people will come and kill you!"

Hrufa went over to him. Heavy as she was, her three-point step, a kind of hippity-hop on two legs and the base of her tail, was both graceful and sinister. She towered above him and he shrank and shut up. She picked the knife out of his belt and held it before him by the blade like a talisman. :Was it when the Barrazani crashed, friend? Did you quarrel over the treasure and separate?:

Berringer asked, "Why are you so hipped on that crash?"

:I'm not sure . . . but it seems to me it must be important.:

"You think the *Bexancir* was carrying bacteria that contaminated the planet? Ask him if the gill-rot was here before that."

The Walash could not shiver, but his skin seemed to be crinkled with terror. "I think—a few . . . a few people . . . not very many . . ."

"Is he sure? Well, that's a good theory shot to hell."

:I never believed in it. We have had decontamination procedures for fifty eras.:

Berringer flung out his arms. "Then that's it."

Hrufa was rubbing her hands over her arms, with a rasp as scales caught against each other. :First they fought . . . then they separated . . . and then it increased? I don't understand.:

"A mystery to add to all the others. Why should it bug you so much?"

:It's something in *your* mind, Berringer.:

"Me? *My* mind?" Berringer scratched his head without making much impression on his brains. "I'm lost."

:A half-obliterated memory . . . something you once read—something about being right . . . but forget that for now. We have this man to deal with.:

The Walash was beginning to twitch not only with fear but with irritation, because his skin was drying out.

Olivia said, "He was very brave to come out here tonight when he knew a man had been killed last night doing it."

"He was brave," said Berringer, "but he also came to kill. They haven't given up. But he's starting to dry out, and we have no place to keep him—and the Walashi would be after our blood."

:That will not stop, whatever we do,: said Hrufa. :Let him go.:

Hrufa held up a hand for silence. She was keeping in touch with the Walash.

Berringer was thinking: *Right. What's so important about being right? Where did I read about being right, and what has it to do with . . . right, I'd rather be right, right on the nose, right is might, this is leaving me right up in the air . . .*

Hrufa said, :They arc—: She bent double with pain that reverberated in the minds around her.

"They're what?"

:They are coming here—:

"Get back in the tank, for God's sake!" Berringer ran a hand over his arm, which had begun to throb. He was tired of telepathy; constant contact with it seemed to form linkages of feeling, stir currents of empathy he did not want to swim in. "I don't know how the hell you could come out in that condition!"

:I'm sorry, Berringer.: There was a humility in her mind that made him uncomfortable.

"I didn't mean to . . ." He sighed. "What are they going to do?"

:Coming here . . . half the tribe, it seems. Vavvingru's woman is about to give birth, and—:

"They'll make a whole tableau of it, slit the kid's throat right before our eyes, I suppose? I—"

:More . . . the woman's too.:

"I see. I thought the baby wasn't supposed to come for a while."

:According to Vavvingru . . .:

"Huh." He looked at Vavvingru, who blinked back at him. "I guess that was the plan if tonight's attempt fell through. When?"

:Just before dawn.: She was half-floating in the lock, eyes closed.

"Less than two hours! They won't worry about hurting us, either, if they were willing to knock off the Barrazani to get their knives. Now what do we do?"

There was no answer. She was asleep or unconscious. Berringer felt panic rising in him and Vavvingru began to wail. "I told her she would not take care of me when she was sick and weak! She promised me! 'Vavvingru, do what you can for us, and we will do what we can for your woman and child.' She promised, and now she is dying and you will let me die! You do nothing! You let him go and you did not even tell him he was wrong to try to kill me! Now you—"

"Shut up." Berringer fought the panic. Hrufa couldn't die. Not now. But he didn't know what was wrong with her or what to do for her; he would have to leave her. It occurred to him that he would hate to see that power and beauty slackened and dulled in death. But dying or not, she was useless.

"Berringer," Olivia said, "I'm frightened, I—"

"Please, not now! Vavvingru, how many men are there in your tribe?"

"The Uwari? They cast me out. I have nothing to do with them."

"I don't care about that! I want to know how many there are!"

"Three of my tribe would make the Walashi. I think?"

"That makes them twenty-five hundred to three thousand . . . maybe a thousand men . . . and full of gill-rot, too. Not much of a defense."

"They are less diseased than the other tribes," Vavvingru said with a touch of reawakened pride. "I am the only one in my family . . ."

"Black sheep." Collector's instinct still throbbing feebly, he asked, "Did the parents of your parents have it?"

"My mother's father had it. He is dead. My father's mother has bad gills, but she is still alive."

Something began to stir in Berringer's mind: *grandparent on each side* . . . "But his parents were normal," he murmured. "Normal phenotype? Heterozygous?" *And what about being right?* He pushed it aside.

"What is it?" Olivia asked.

"I don't know, maybe an idea—but there's not enough time."

"What are we going to do?"

"Somebody's got to go out there and . . . Vavvingru?"

"Not me! Not me! They'll kill me!"

"Yeah. Well, I'll have to go. Look," he pointed at the map, "Uwari territory's quite close to where the Walashi are now. If I could get out there in the skiff, get a few of them to follow me in and stand up to the Walashi even for a few minutes—just so the Walashi will know it won't be a pushover, maybe—maybe it'll slow them down enough to start them talking."

"The Uwari won't do that," Olivia said. "They won't even talk to you."

"It's about time they started." He went over and looked at Hrufa. There was a pulse under her tapered jaws and her gill-slits were moving slightly; that was all. He hurried into the locker room and broke out a quilted suit with a heat unit insulated against moisture. As he was struggling to get into it he called, "Olivia, will you get me the stungun? It's—" The zipper snagged and he fought with it. "Olivia?" He came out into the tank room. She wasn't there.

"Olivia?" No answer. "Now where the hell is she?"

He began to search the rooms. Before he was through he heard the cough and sputter of the small boat leaving the dockside. He ran out to the end of the dock, yelling. All he saw was the rapidly dwindling light. "She's run off! She got scared and ran off! Where the devil does she think she can get on this goddamn mudball?" He ran back into the tank room, raging. "Hrufa! Hrufa!" Panic mastered him.

Vavvingru said, "She has gone to talk to the Uwari."

"Why? For God's sake, why?"

"She thinks she can do it better than you, but you will not trust her."

Berringer took a deep breath. He was trembling. He went into his cubicle and took down the stungun hanging on its harness from a hook on the wall. It was the only gun on Xirifor II and it was not a lethal arm. GalFed Observers did not carry them. There was another in the ship, but *Explorer 78732* was orbiting beyond the clouds, and there was no time to go up in the spaceboat and get it. He peeled down half the suit, buckled it on, zipped up again. He didn't expect to get much use from it.

Vavvingru saw him coming out and yelled, "Where are you going? You are leaving me to—"

"I'm not. I'm going swimming. If there's gonna be a fight, I'm keeping it away from here."

"You will dr—"

"I've got a mile of shallow water, and I don't want to lug tanks. If Olivia's lucky enough to get the Uwari they can meet me on the way." He had an icy realization that the Uwari might want to kill Olivia rather than dicker, and he had done nothing to safeguard her. And Hrufa was useless, he couldn't talk to Thlyrrh, and Vavvingru—

Vavvingru climbed over the edge of the tank and dropped down. "I'm coming with you."

"You'll be safer here."

"They'll come when you're gone! I know! They will! The Big One can't help me now!"

Berringer looked at him and shook his head. A burden to the last, Vavvingru, half-suppliant, was clutching at him, terror and determination mingled on his face. "Come on then, you idiot."

The boat skimmed swiftly over the water under the dark sky, never black or blue-purple but only midnight grey. Olivia felt herself coming alive at last. Even by her outward appearance, reflected dimly in the viewport, she could see that her cheeks had become pink, her eyes sparkled, her skin seemed smoother and softer, and her hair fell more gracefully around her face. She was in fact pretty. And with reason: she had had no real contact with the Xirifri during all the months she had been on the planet, and she was about to function at last. She unfolded her map and checked it with the chart panel of the skiff. If the GalFed survey, plus Hrufa's telepathic checks, meant anything, in twenty minutes she ought to reach a place where there was a good concentration of Uwari; if their tp was in good order they would know she was there. The rest was another big gamble.

Berringer paused at the edge of the dock and looked out at the water, not at all eager to jump in. He was thinking, *Forty-seven*

scrappy tribes, what kind of unified people can be welded out of them? Forty-seven . . . the number of chromosomes in the cells of the mongoloid idiot. Hrufa would say: only among humans. Without the sense of Hrufa's mind resting along his, he felt almost empty-headed.

Vavvingru said, "Berringer, the Shining One is following."

He turned. Thlyrrh came down to the edge and stopped near him. "Go home, Thlyrrh!"

Thlyrrh stood. Berringer waved his arm. "Scram!" Thlyrrh shook his head. Berringer planted fists on hips and ground his teeth. He was helpless either to communicate with or make use of Thlyrrh.

Thlyrrh solved the problem himself. He pointed to Berringer, touched his own back, and lay face down flat on the dock, head toward the sea. His body shifted, melted, arms into sides, fins extruded, legs together, rounded, feet splayed into tail.

"I see," said Berringer. "All purpose." He straddled this new marvel, and with Vavvingru following, they leaped, a man on a dolphin, into the sea.

Olivia was crouched on a reedy hump of clay that was threatening to crumble into the rest of the marsh; the boat was idling softly a hundred yards away, the lid of cloud paling in infinite slowness. She had a waterproof suit with not enough warm clothing underneath, and she was cold and damp, but there was an old excitement rising in her. Failure and danger meant nothing to her now; she recalled experiences on a dozen other planets, waiting for creatures beyond imagination, their hypnotically-learned languages limber on her tongue: spindly peoples in gleaming carapaces, humped ones armored in poisoned spines, flowing Crystalloids that buzzed and twanged—she knew and loved them all, and none could surprise her.

Still, she caught her breath in always renewed delight as lights glowed and swelled underwater, green, blue, and yellow, and men rose black and streaming against the dawn.

I never knew they had light; it's beautiful. Trained observation took over: animal bladders filled with luminescent plant matter. And there was no time for the pleasures of looking and waiting.

The Xirifri were carrying the lamps slung from a long line of plaited rope on their shoulders; as they came up the lead man folded the rope and left the lamps on the ground like a long string of Xirifer pearls fallen in a heap, dulling in the paling sky. There were five men, and a woman followed them out of the water. Xirifer women were slightly smaller than the men, their gills a little paler and less voluminous; they had two, or rarely three, teats ranged vertical-

ly on their bellies, and Olivia had sometimes seen them through Hrufa's mind as they swam underwater, pulling their babies along with them, each clamped hard to a teat by its soft tubular gorge as its mother pumped milk down into its throat by the movements of her arms. They had made Olivia think of a plane towing a brace of gliders.

This woman had no babies with her, but she did have the rope of pearls round her waist that marked her as a priestess. It looked as if Olivia were going to be taken seriously. The first of the Uwari had a belt with a long cuneiform shell fragment, a primitive knife, tucked into it. Olivia stood up and he came over. "You are of Galactic Federation."

"Yes."

"We know you through the mind of the one you call Hrufa."

"You came close enough to know that and you would not speak to us?"

"The Walashi have been against you." It was not an auspicious beginning. The Uwar went on, "We have waited for you to give us knives and a cure for the gill-rot."

"We came to learn about you and your disease, for that we must live among you and speak with you for many days, and we cannot give you knives only for you to make war against the Walashi."

"Yet it is in your mind to lead us against the Walashi now, without knives, without cure. Why is that? I think you mean us harm."

"Have you found harm in the minds of any of us yet? Look further." But what was there to see? Her heart sank. This was a fool's errand after all. She had nothing for them but a strong risk and a weak hope. She pushed on nevertheless, "Galactic Federation teaches men not how to fight but to live in peace."

"We are not fighting now, because we have no knives."

She refrained from telling them they were fighting tribes that were weaker than themselves. "You must learn to have knives and not use them to fight. A knife is something that tells you how much stronger you are than another man, but you should not have to kill a man to show that it is so." She glanced at the man behind the leader. His gills were shrinking at the edges; they already seemed dry and crinkled. "You believe knives will do everything for you. They will not stop gill-rot even if you kill every man who has it, as the Walashi do. Only Galactic Federation will help with that, and if you let the Walashi kill us or drive us from this planet you will sicken with gill-rot till the sea is full of your dead, and men will come down in ships and take your pearls for no price at all." She took a risk. "But you may say you are not so troubled with gill-rot after all, and you can keep out of the way

of the Walashi and still be strongest over those other tribes who are so small and weak and sick . . ."

There was an angry stir among them and she thought, *Now I've torn it,* but the priestess pushed them aside and came forward. "Men think they must fight and kill for everything. My son has gill-rot. I want to talk to the Walashi." The men glowered at her, but were silent.

Olivia choked down her sob of relief. "If your men will listen . . . as many strong men as will take the risk . . . I can only tell you the truth. It is a terrible risk . . ."

Berringer was belly-down in a reed-patch by the Walash border, Vavvingru and Thlyrrh beside him. He was sopping and cold in spite of the heat-wiring, terrified with worry over Olivia and Hrufa. *I should have come with scuba, but what's the use? And what am I to do when they get here?* He was wondering if it wouldn't have been preferable to resign himself to being a comfortable failure rather than a dead one. He turned his head and saw the dark hump of the Observer Station, nearly a mile away; he said to Vavvingru, "This is stupid. They could be coming around by another way while we're out here."

"Why? They will not be afraid of us now that the Big One is sick."

"Thanks." That was comforting. But perhaps they might be afraid of Thlyrrh; still, he couldn't depend on Thlyrrh, who did not have the emotions and reactions of a man, even an extraterrestrial man. The silver shape, restored to humanoid form, rested beside him in the weeds, silent, immobile, unpromising.

Vavvingru twitched convulsively, and screeched, "There! There! Look there!"

"Where?" Berringer could see nothing.

"There!" His pointing arm was rigid and trembling. "They—"

Berringer strained his eyes and saw a roiling of the surface far to the south. He began to crawl backward. "Down! Into the water—"

Vavvingru screamed, "No! They have her, they—"

"Vavvingru! Get back!" But he had already jumped up, leaped over the hummock, and dived, half out of his mind between terror and anger.

"Vavvingru!" There was a horrible swirling and bubbling of the water. Berringer watched paralyzed for a moment, and then Vavvingru came out of the water, walked slowly up the bank, fell forward on hands and knees. Berringer got up and ran to him, sloshing, ripping his feet from the sucking mud at every step. Vavvingru looked up very slowly, eyes dulling. "You . . ." he said, and slumped forward dead. There was a knife driven to the hilt in his back.

As Berringer dropped to his knees beside him, the Walashi began coming out of the water. At the same time he heard the purring of the boat out of the east: Olivia. He jumped up waving his arms and yelling, "No! No! Get back!" It was too late. The water around him was thick with Walashi, they were swarming out of it, every Walash Berringer had ever met, and more; two of them had the woman, belly swollen, struggling feebly between them. Their great black eyes stared, their gills ran like rainstorms on the water, their knives were in their hands.

The waters clamored in the east with Uwari following Olivia in the boat, and Berringer screamed, "Don't! Stay back!" He fumbled for the gun, two Walashi came at him and knocked it away, others dived and set out to meet the Uwari. He jumped back to duck behind Thlyrrh, but they had him and were pulling him down into the water.

A mindsearing blast of force swelled and burned over the world and everything went black.

When the darkness washed from his eyes in streamers and spatters, Berringer pulled himself up groggily, fighting nausea. He scrubbed at his eyes with his fists and looked around. Thlyrrh was stretched out beside him, the metal surface showing no sign of whether he was hurt. Olivia was hanging half out of the boat, which was rocking a little; she began to move weakly. He waded out and lifted her. She slumped against the inside, shivering, and he drew the boat toward the sedgy island, pushing aside the bodies of several Xirifri who were floating half-conscious on the surface.

Olivia whimpered, "What was it?"

"I don't know . . . the only source of that kind of thing I can think of is Hrufa . . . and unless somebody's got a new weapon . . . but I don't know."

The Xirifri were stirring. Thlyrrh stood up shakily and very slowly opened a door in his midsection; he probed into it delicately, decided he was still alive, and closed it again.

"Vavvingru's dead," said Berringer. It was all he could think of then. He waded up to the body and turned around. "Olivia, look!"

The Walash woman was lying across Vavvingru's body; her hands were twitching a little. Between her legs in the cold rippling sedge a baby lay swathed in slime.

"It's the kid . . ." He tried to pick it up, but it was too slippery. While he was looking around for something to grab it with, hands reached for it. He looked up. The Uwari priestess was grasping it by the legs and pulling it gently away from its mother. The fists clenched, the twig-thin arms jerked, it gave a gasping cough.

He looked into her eyes. "It's a boy, isn't it?"

"Yes." She dipped the child in water, dredging it till the slime washed away, wrenched the knife out of Vavvingru's back, cut the cord, and laid the baby face down along its mother's belly, where it found the teat with its mouth.

"There's nothing wrong with its gills," said Berringer.

"No," the priestess said. "I don't know why."

Perhaps his brains had been jogged by the blackout, but something dropped into place for Berringer. "I know why," he whispered. "It's not 'right' as in 'right or wrong' but Wright, like the Wright brothers . . . the Wright effect. . . ."

The Xirifri had sorted themselves out into their home teams, but they were groggy and no longer in any mood for a fight. One of the Walashi went over and stood looking down at the mother and child. Berringer, kneeling, looked up. "Are you the leader here?"

"Yes."

"This child is perfectly healthy and well-formed, isn't he?"

The Walash fidgeted. He was looking abashed and likely had a splitting headache. "It is true."

"And he will not likely get gill-rot later—is that true?"

"Yes, Solthree."

The priestess broke in. "We must get them into the water or they will both dry out."

"Go ahead." Nobody stopped them as she pulled Vavvingru's woman, clasping the baby in her arms, into deeper water; mother and child lay there content, oblivious to everything around them.

"And," said Berringer, "she had no other man, no other who could be the father?"

"That is my daughter," the Walash said, affronted. "She had no other man."

"Your daughter. Well."

A second Walash came up. The new grandfather pointed, "This child has healthy gills."

"It is a wizard child," the other Walash said, "made by magic. It should be killed with its mother."

There was a nervous moment, and Berringer shook his head and sighed. But the leader said, "This woman is my daughter and this child is my grandson. Perhaps you should die for saying that."

"Don't," said Berringer. "Please, that's enough. You've killed a man here today already. You've got a healthy baby here. Why don't we just pack up and go home?"

The second Walash sneered, "If this is not a wizard child, perhaps the Solthree, who is so anxious to leave us, can explain it."

Eyes lifted from the feeding baby to Berringer, and his non-specialist's heart sank. Trying to explain even elementary genetic principles to a terribly primitive tribal people in a dawn-era lan-

guage—the faintest whisper of a thought crept into his mind. :Go ahead, Berringer. I will help if I can.:

He and Olivia looked at each other and grinned. *Hrufa! Am I glad to hear from you! What—*

:Questions later. First finish what you have begun.:

Berringer took a deep breath and looked for intelligence and understanding in the eyes of his watchers. The Uwari priestess seemed the most promising, and he focused on her.

"I will explain this to you in the best way that I can. But while I am doing it, you must remember that the magic in this has nothing to do with the magic you work. It is a magic belonging only to the gods who make life.

"Every man and woman has a seed for making a child. When they mate and the two seeds meet and become one, the child begins to form."

"Every fool knows that," the skeptical Walash said.

"I'm glad you think so," said Berringer. "Every seed, in every man and woman—" Hrufa imposed a mental picture of the gamete, threaded with chromosomes, strung with genes that looked very much like Xirifer pearls, "—bears in those beads, packed in those small spaces, messages sent by the gods to tell whether a male or female child will grow from them, whether its gills will be more red or more purple, whether its skin will be more grey or more blue. Sometimes one of those messages is a bad one, carrying wrong information . . ." One of the beads in the chromosome shriveled and blackened, pulsing with evil.

"As a punishment from the gods," the Uwari priestess suggested.

Berringer considered, and glanced over to Olivia; but she was leaving it all to him. The idea was too inimical, and he shook his head. "No. As a mistake."

The Walash said fiercely, "The gods make no mistakes."

"Never?" Berringer looked down at the body. "Not even when they allow you to believe it is right to kill a harmless man?" They were silent, less out of conviction than from embarrassment. "A mistake," he said firmly. "Sometimes a bad message will tell the forces of life to give a baby one finger less than he should have in each hand, or one finger more. Or he will be born blind, or very stupid, or his stomach will not work properly. Or his gills will not breathe as they should, and will fall apart, and he will die because he cannot live always out of the water." He stopped to think: *homozygous, heterozygous, dominant, recessive.* He plunged on.

"Every man has many messages in his body and the gods choose a certain number to send in the

seed that will make his child. Sometimes they will choose a bad message if he carries it, sometimes not. But the gods are kind: most bad messages are weak, like the one that brings gill-rot, and if a man gets one from his father, or one from his mother, it will not hurt him. But if he gets this message from both his mother and his father," the gametes joined, the blackened genes matched with each other, "and if they both say: give that man gill-rot—then that man will have gill-rot." The morning winds were drying his suit, but he was sweating. "Some of these messages—like the one for gill-rot again—become weaker when they are received by a woman, and even if she has two of them, she will not be hurt so badly. But when she gives the message to her son it will become strong again. But this is not her fault. There are some diseases that are more likely to hurt women than men. You understand?" he asked hopefully. They were blinking at him, dipping themselves in the water.

"We understand," the priestess said. "Do all the ills of the body come from the seed?"

"No, there are many causes. I'm not completely certain that this is the cause of gill-rot, but because the child has healthy gills I believe it is the most likely one."

"This child is healthy because it only has the one bad part of seed, from its father."

"Yes." He knew what was coming next. The woman was not stupid.

"When he becomes a man he will still have that bad thing in his seed, and he may give it to his children."

"Yes."

"Then this thing will stay in our seed always. So how can you cure it?"

"*I* cannot cure it. But Galactic Federation will come here and examine, and make tests, and study the bodies of dead men if you will let them, and ask questions, of you and of themselves: how does this message work on the body? What does it do? Does it block the blood supply so that the gills will not work right? Does it close up the slime glands so that the gills are not protected? If you let them work at it long enough they will find the answer, and perhaps a medicine for your gills. But the evil in your seed will remain there always. It is part of the life your gods have given you."

"They have not given it to *us*," the Walash said proudly. "We have cured it ourselves."

"You may have much less of it, but you have not cured it," Berringer said. "And you have caused the other tribes to have a great deal of it. You Walashi have done much harm to this planet."

There was a grumbling, and the Walash said, "We cannot do anything to them with our seed

out of our bodies. You are lying."

Berringer shook his head. "You had very little gill-rot on this planet before the ship *Bexancir* came. You fought with the other tribes over the Barrazani knives and you won. You must have done well for yourselves that day because you made them all so angry with you and with themselves that they separated into the smallest of tribes and would not marry with each other, but only hid themselves in little clusters among the weeds and in the pits of the waters. That was why they got gill-rot." He stopped for breath.

Hrufa said from her distance, :Go ahead, Berringer. You're doing very well.:

Yeah, Gregor Mendel's spinning, I can hear him now. Shield for me a bit, Hrufa. One or two things they shouldn't know just yet.

The Walash was sneering, "The Solthree in his wisdom has a new kind of magic to explain this accusation?"

"No. I can explain it in terms of what I've told you already. If a man who wants to mate has many women to choose from he will likely choose the healthiest who will accept him. If he has the sickness in his seed it will not matter to his children as long as his wife has no sickness. Or if the sick seed comes from the mother and he has none. But people who are separated into little groups have less choice: in order to have children at all, a man may have to take a sick woman or a woman to accept a sick man. In a big tribe these sick people would not have been chosen, and would have had no children to give their seed to. If two healthy people who each have one sick seed have four children, one will likely be sick, and two of the others carriers of sickness, and if all of them mate with others of the same kind in a small tribe, the sickness will spread and spread till everyone is sick or a carrier. That is why you expected Vavvingru's child to have gill-rot."

The priestess asked, "Why are you telling us this, Solthree, if there is no way out of this trouble? Galactic Federation may take so long to find a medicine that most of us may be dead first."

"There is a way out. The men and women in a small tribe carry only a limited number of messages, good or bad, in their seed, and the gods are forced to choose the same ones over and over, in that limited number of combinations, in order to make the men who will keep that tribe alive. In many tribes and many men there are a great many more choices of message, more than the drops in the sea.

"If you tribes will join and mate among each other you will give the gods that many more choices. Also you will be able to choose a healthy person in another

tribe, perhaps, rather than a sick one in your own. Then the gill-rot will grow less and less, as surely as light dies in the evening. I tell you in truth it will take many years for this to happen, and I am careful to tell you so because I do not want you to come to Galactic Federation in twenty years and say: this man you sent to us is a liar, he told us gill-rot would go and it is still here. But Galactic Federation will likely have found a cure long before that time. Still, even without a cure, if you do as I say the gill-rot will decrease."

The priestess said, "Will you tell all of this to all of the other tribes?"

"I will if they will let me."

"They will let you. I know all of their priestesses. *We* do not fight."

The Uwari were twittering among themselves, but the Walashi stood in cold silence. Berringer smiled. "I can also tell you, Uwari, that if you tribes mate among each other you will become healthier *even if you do not have the Walashi to mate with.* Together you may become as healthy as they, and far greater in numbers."

The Walash leader said, "It was perhaps a mistake to listen to you. We still have the knives."

Berringer said gently, "Walash, from this time on your knives will only be good for cutting the food you eat. They were weapons when your world was known only to yourselves, but no more. Once Galactic Federation discovers a world it becomes known to many other kinds of men as well, and not all of them want to help it. Your pearls are now known to many peoples in the Galaxy, and they are considered very beautiful and valuable; one day a ship may come down here full of men who will say: what do we care about the Walashi and the Uwari? We can kill them all and take the pearls for ourselves—even as you took the knives of the Barrazani. They will be able to stand above the clouds where you cannot see them or even know of them, and drop poisons that will kill you before you know what is happening. You have seen the powers that Thlyrrh and Hrufa have—and they were only trying to help you. If they had wanted to destroy you, what could your knives have done even against them?"

"You are still telling us we will be killed, one way or another!"

"I am trying to tell a proud and headstrong warrior people that they must not kill off all the other men on the planet—but also that they need not become peaceful weavers of nets if that is not in their nature. Now you are like the gill-rot, a kind of plague on your own planet. Why not use the powers of war to defend all of the peoples of your world from the evil that may come from beyond it?"

"With knives?"

Berringer grinned. "No. With the ships and weapons Galactic Federation may allow you if they come to believe you can learn to use them—and use them wisely, to defend yourselves. With people of Hrufa's race to read your minds, they will know how to believe you."

The Walash considered. "What if we would keep things as they are, and do not agree with you?"

"This planet is known. Things will stay as they are for a year, two years, ten—and then there will be men who want your pearls. It is too late for choice."

"I will think of it," said the Walash. It was the full light of day, and Berringer saw that the man's skin was dry and crinkling. He had been too proud to dip himself in the water before an alien. Before he would do so, he took off his belt, which had no knife—he had lost it in the blackout, or else he had killed Vavvingru with it—looped it loosely round the feet of his daughter, and went under, pulling woman and child behind him. The other Walashi followed. Berringer watched the last of their ripples in the water. The Uwari began to leave.

The Uwari priestess was still hesitating before him. "We are safer now, even for a little while," she said. "Thank you."

He looked down at Vavvingru's body. "There's nothing for him."

Hrufa said, :He was no hero, Berringer, but he was not useless.:

The woman knelt down, took the pearls from her own waist and tied them around Vavvingru's, and pulled him away from the sedge. In a manner returned to his people, he vanished under the sea.

Berringer crawled into the skiff beside Olivia, and Thlyrrh followed.

"You promised them a lot," she said. "GalFed might have our heads for that."

"We've still got them on our shoulders, and that's more than I expected an hour ago."

"I got a drift from Hrufa about your hiding something from them—you weren't selling them a bill of goods, surely?"

"No. Everything I said was true, as far as I could make them understand." He grinned wryly. "I was saying a lot, thinking a lot before, about forty-seven being the number of chromosomes in the cells of the mongoloid, and about forty-seven tribes and a bunch of idiots . . . there's a genetic factor called the Wright effect . . . this kind of gradual spreading out of one gene, in this case the gene for gill-rot, till most of the population have it—it only happens *in extremely small populations*. Wright gave the upper limit as a hundred breeding pairs. The Walashi are a big tribe, and they've cut out the disease the way the Middle Ages treated leprosy. The

Uwari are smaller and suffer from inbreeding enough to make them uncomfortable, but they're in no danger—though I wouldn't let them know it. But those other little tribes, forty-five of them, some with less than two hundred people . . ."

"I see."

"It was some dumb chance. If they had divided themselves into twenty-three warring tribes, or thirty, or even thirty-five, they'd have been big enough so that gill-rot would have bothered them, but it wouldn't ever have become dangerous enough to make them call for help. They happened to choose the number forty-seven. That's what I didn't want them to know. I didn't want them to think they could pair off and join tribes by two's like the genes in the gamete till they had twenty-three, and keep scrapping till doomsday. I figure they came near enough doomsday already . . . they need a little time to grow."

Berringer watched her beside him as the boat neared the Station. Though her hair was in strings from being splashed, and she had a couple of bruises from knocking about in the donnybrook, her eyes were sparkling and her cheeks flushed; she looked better than he had ever seen her because her face was so alive. She had enjoyed her part of the caper. When he had had one short glimpse of her coming up with the Uwari, a thought had flashed into his mind about Boadicea in her chariot leading the woadblue hordes, but he was not likely to tell her that.

While he was handing her up on the dock he remembered something. "I have a question to ask, too. I'd like to know why you ran off in the boat like that. It scared hell out of me."

"You thought I was running away? I was frightened, but I knew it had to be done, I could do it best, and I didn't want to waste time talking about it."

"At least if you'd said something we could have worked it out togeth . . ." He saw the glint in her eye and the words trailed off.

"The way we've been working together all along on this trip, Berringer?"

He sighed and went off to find out what had been going on with Hrufa.

There was a big new crack in Hrufa's tank and water was slowly seeping from it. She was lying on the bottom, looking exhausted. In one corner there was a mass of gelatin with a number of three-inch wriggling creatures swarming in it.

Berringer stared at it. "I guess it's the style. Everybody's having them. How many?"

:Twelve living. One is rather weak.:

"Boys? Girls?"

:Seven male, five female.:

He stooped and examined them, doubtfully. "They won't try to eat each other up, or anything?"

:Of course not, Berringer!:

"It won't be safe lifting off with them."

:They will be strong enough in a month.:

He grunted. "You girls crack up half a planet every time you give birth?"

:It doesn't usually happen under such stress—and of course we're used to it.:

"Well . . . this tank's gone. We'll have to fix you up with—with the other one."

:Berringer . . . you've done well—and you are not content.:

He had imagined that if success ever came to him it would come whole and sweet, and that had been idiotically unrealistic. All he could think of was that Vavvingru had trusted him, and he had let him die. "I'm tired . . . I don't know if my ideas are worth anything. At least they won't fight for a while, and maybe they'll listen."

:I know you are angry with me for coming out here like this and endangering you.:

"I'm sick with anger at myself for risking Olivia with the Uwari, for letting Vavvingru die."

:I felt that way when I killed the Walash.:

"That was accidental."

:Berringer . . . I suspected I was to have children before I came out here. I shielded, told no one, took no tests . . . because if I were to abort again out here where nobody could check on me—it would stay off the records, and—and—:

"But the MedCheck—and your people, telepathy—"

:There are ways of circumventing those things . . . you are smiling because for all my moral pronouncements you find me fallible and vulnerable.:

"No, Hrufa, you read me wrong for once. I'm just glad to know you're human. No slur intended."

He was sitting in his cubicle thinking of the reports that had to be written, and too wrung out to begin, when Olivia came to his door. He stood up.

"It seems we're staying here for a while." The action had caught up with her, she looked tired and haggard.

"Yeah." He thought of the light he had seen in her face and wished there were more of it; he thought of the stupidity of their quarreling and wished there were less of that. But he didn't know what to say, and shut up.

Olivia's face was twisted with months of anger, and if there was any softness in his eyes, she missed it. "You said we wouldn't be able to get anything done with Vavvingru alive. Now you're rid of him you ought to do a lot more."

His shoulders slumped and he turned away. She stood shocked for a moment. "Berringer! Please,

I never meant to say anything like, I don't know what, I—" she pulled at his shoulders. "Please, forgive me, I didn't mean—" she turned him about unwillingly. "I know you cared about him, I—please!" took his averted face in her hands, reaching for human flesh for the first time, "oh, don't look like that! What have I done?" brought his lips against her mouth and tasted with them small salt crystals from the seas, "what can I do?"

"Kiss me again," said Berringer. His arms slid round her waist. "You need—we both need the practice."

BOOKS

ONCE UPON A MUNDANE TIME, before the first satellites went up to weave their orbital spells around the Earth—in the remote and disenchanted days when 'pseudoscience' was the librarian's reference term for space fiction—in that vanished past of a decade or more ago, it was fashionable among learned critics to speak (often at length, always with condescension, sometimes with fury) of the phallic symbolism of the rocket as the underlying appeal of the 'escapist fantasies' of science fiction.

I rather miss those angry old men now. It would be comforting, with space de-pseudoed, to hear the eminent distinctive voices still crying out against the (ab)use of non-fantasy rockets as virility symbols in the battle for potency between two great world powers. But it is no longer *in* for intellectuals to patronize man's yearning for the stars or his phallic fascinations. S-f and the Literary Underground made the highbrow-pop hit parade together, roughly coincidental with the Beatles, Op Art, and the God-is-Dead movement. The heavens are under attack in more ways than one. I am waiting now for the late-comer critic who will emerge with a mouthful of insight about the New Symbolism of Space and its Significance in Modern Man's search for New God's to replace the One whose recent death has been so widely publicized by other learned doctors (with special claims to intimacy with the deceased).

On second thought: why wait? Listen, out there—

Space fiction is two kinds of things today: adventure stories, and symbolic speculation. The adventure stories are *about* space flight; they are no longer what we real-true-*inside* readers of the stuff call science fiction. But, after a comparatively planet-bound period these last few years, the rockets have come back to science fiction in a new way. The flight into space is a symbol of the 'expanding consciousness'; it is a symbol of growth; and it is, just now, very much a symbol of the search, not for god alone (although that exploration too is going on), but the meaning of god, and of man's search for god.

I do not mean to suggest that the treatment of religion in s-f is

new: far from it; only that it has acquired a new importance, a new incisiveness, and perhaps most of all, a new element of compassion, or depth—a recognition of the subjective 'reality' of religious experience to the individual human being. Although it was not the first of its kind, Walter M. Miller, Jr.'s A CANTICLE FOR LIEBOWITZ is probably the landmark-work setting off the new kind of religion story from the (generally more 'sociologically oriented') earlier sort.

(It is an intriguing coincidence, by the way, that the final section of that novel, "The Last Canticle," was published in this magazine during the same International Geophysical Year, 1957, in which the first satellites went up.)

In any case, a very large proportion of the more seriously speculative work now being produced is closely concerned with one or more aspects of what might be called the religious functions of man. And there seems to be an intensification and concentration of interest beginning to take place.

Four new novels in any case, have succeeded in exciting me as I read in a *way* that very little has done recently.

Frank Herbert's DESTINATION: VOID (Berkley, 50¢) is a meaty examination of the nature of 'consciousness', of the 'ego', and of 'life', by a small group of highly trained people whose personal survival depends on learning enough to build these attributes into an electronic computer. In NIGHT OF LIGHT (Berkley, 50¢), Philip Jose Farmer is concerned with the nature and significance of 'miracles' and 'divine manifestations', and the ethical and theological conflicts posed by diverse manifestations in a universe no longer conceived of as uniform in its 'realities'. Clifford D. Simak explores differing concepts of 'immortality' and the relationship between belief-in-survival (whether in the flesh or spirit) and social mores, in WHY CALL THEM BACK FROM HEAVEN?, (Doubleday, $3.95). The fourth book, not published as science fiction, is described in the jacket flap as 'the most brutal fairy tale since Anderson and Grimm yielded the form to Tolkien, C. S. Lewis and Golding.' THE SCORPIONS, by Robert Kelly (Doubleday, $3.95), centers on the question of the efficacy of the several most customary modes of defense (ritual, fetish, insight, faith, reason, violence, to name a few) attempted by terrified mortals in the face of the expanding unknown of the 'known' universe.

In one sense each of these books, individually, is unsatisfying; considered as conventional novels, they offer a particularly well-rounded variety of failings.

Farmer has tacked together two widely separated episodes in the career of John Carmody, the criminal-turned-priest with whom many *F&SF* readers are familiar; the book suffers not only from the characteristic stiff joints of such novelets-become-novel, but also from the unhappy improbable-quasi-caricature feeling so many 'series character' stories seem to acquire in the introductory scene-setting sections—and of course, there are two such bits to get through in this one. But the last halves of both sections are integrally related and powerfully modelled, in full depth and dimension.

Simak seems to have compressed most of his thematic content into a tiny portion at the end of the book, in order to make space, within a standard-length category book, for a disappointing action-adventure midsection. But the beautifully balanced opening, in which character, plot, and context form an inner-motivated unity, provides basis enough to take the reader through the comparatively empty middle, to the extremely provocative, though sketchy, conclusion.

Herbert's book has the vices of its virtues. It is a 'puzzle story' of the memorable (but largely unreadable) type characteristic of the best idea-stories of the early Campbell *Astounding*. That is, the characters and setting seem to be devised essentially as components of the puzzle and tools for its solution. After the manner of such stories, the book consists almost entirely of dia- and monologues, both interpersonal and interior, which set forth the progress of the argument, and of engineering sessions at the electronics bench, in which the pretty girl hands parts and pieces to the inspired engineer—with a bit of hot math thrown in for emotional kick. Yet these primitivisms are easy to ignore (are perhaps proper because they *can* be ignored?), in favor of concentration on the genuinely, and consistently, exciting pursuit of ideas which constitutes the true action of the book.

Kelly comes from a different tradition entirely. His prose (or, as often, prose-poetry) is a consistent delight, and he can impart an illusion of reality to the most trivial, clichéd, and inane characters. He works in the true tradition of the symbolists, and does it knowingly, charmingly, and effectively. But so many of his concepts and characters *are* trivial-to-inane, and if not exactly clichéd (because contemporary), distressingly derivative. His protagonist seems to be compounded of equal parts of Nero Wolfe, 007, the Dharma Bums, and Alistair Crowley; his imaginative scope suggests a landscape of Henri Michaux's projected in cinemascope on the

sides of the Batmobile. It is only a mastery of narrative and description (perhaps equal to Michaux's) that carries one on to the (deliberate) irresolution of the non-ending.

Four frustrating books—yet in Kelly's campy, careful nihilism, as in Herbert's scientistic positivism, (DESTINATION: VOID, despite its title, is the only book of the four that presumes anything like an answer to the questions posed), and in the more moderate approaches of the other two, I did find that special kind of excitement that has become all too rare in the new novels—the particular kind of thrill that creates the 'science fiction addict' and can only originate in the author's own excitement in exploring unmapped territories of the mind.

Simak, for instance, deals with the effect on society of the kind of deep-freeze potential immortality we have heard so much about recently. He describes a rigid neo-puritan culture, a world of penny-pinching, body-saving, emotional isolationists, living as unremittingly for the Next Life as ever fundamentalist Christian did, because any man or woman who fails to provide an adequate investment sum to grow for him while he is frozen, will be unable to compete in the reawakened society. A truism, actually: the same phenomenon that pressures the high school student to work for nothing but grades, in order to be admitted to college, or the university undergraduate to work for nothing but grades in order to be admitted to graduate school, the graduate fellow to, etc., in order to gain a research fellowship. (There it changes; the research fellow works for publication, not grades, to get a professorial appointment.) It is belief in the future that makes us capable of sacrifice; absolute belief in literal immortality, of whatever sort, makes us virtually incapable of non-sacrifice.

The only free men in such a society are the outcasts. In the world of Forever Center, this means the rare criminals who have had a 'death sentence' and walk as living ghosts through the rest of their natural lives, aware that when they die, it will be for the last time, and forever; or those less finally cut off, who retain their right to a new life, but wear the brand of ostracism, so that they are unable to work in any way to prepare for the next world.

From this base, Simak poses problems relevant to all concepts of immortality and the basic premises of most Western concepts of God.

Farmer tackles a different aspect of religious belief. By presupposing a planet on which verifiable miracles actually occur, and where, through a form of mass

telekinesis, the entire population can and does at intervals literally *create* a flesh-and-blood god, he poses two vital questions:

1) If it is true that Man created God in his own image, rather than God giving life to Man, does that diminish the 'reality' of the created Being? Is God less 'real' for being the created rather than creator?

2) If Man does create God, and the image in which the creation is patterned varies with every culture and time and place, is one God more 'true' than another? Does the God of the wisest and most virtuous people outrank the manifestation of a thieving nomad tribe, for instance? Is a Galactic God more powerful, or more valid, than a local planetary one?

Kelly and Herbert are both less Christian and more catholic in the questions they raise; neither one presupposes the importance of any literal manifestation of deity; they are more concerned with the way in which man can relate to his own concept of godhead to the advantage of his inner satisfaction and outward efficacy. In many ways, these two books are opposite numbers, examining from very different platforms much the same problems of consciousness, ego, and the meaning of life.

Kelly starts with a hero convinced he has attained a fair degree of wisdom on these matters, living a carefully ritualized and insulated existence, in which he is almost totally isolated from communion with other people: as psychiatrist, he is mirror or camera to his patients; as a private man, he surrounds himself only with people who will function as mirrors or servants. He is then taken out of his temple/office/home, and must test the validity of his wisdom in direct contact with life.

Herbert proposes a dynamic concept instead: ". . . consciousness is a field phenomenon . . . It's not introspection, not sensing, feeling, or thinking . . . It's not synonymous with awareness. It's neither subjective nor objective. It's a relationship . . ." and later, *"Emotion . . . the characteristic that gives us our sense of person, the thing that summates personal judgments. A process in capsule form that can occur out of sequence.* Here was a break with all machine concepts of time—emotion as process, an audacious way of looking at time."

(I must add that the physical presentation of this book did nothing to add to the pleasure of reading it; it is probably the most appalling job of proofreading I have seen in twenty years of reading some startlingly badly prepared volumes. The sentence on p. 98, for instance, that reads, ". . . consciousness is a field-regulating

sensor, mental and emotional responses," I finally worked out *had* to have been: ". . . consciousness is a field regulating sensory, mental, and emotional responses." It is bad enough when this sort of thing happens to westerns or love stories, but in a novel of this sort, where the concepts are complex and the language sometimes more so, careless typography is unforgiveable.)

It is not possible to point out all the ways in which these four apparently unrelated approaches intersect with each other to achieve a geometric progression of ideation. I do want to take a bit of space, however, to return to the business of symbols.

Part of the reason for the success of each of these books, even in limited terms, is the accuracy (or intuition) with which the backgrounds, the imaginative elements of the environments, were selected in each case. *Only* an alien planet could supply the appropriate symbolic level for Farmer's concepts. Herbert's novel would have been a dull, not-much-dramatized essay if the same project were being researched in a ground laboratory; but in an exploratory space ship, with all the knowledge of the universe as the potential reward, imminent death the penalty for failure, and no help at all available from parent Earth (beyond the training and equipment already provided before the departure), the search for 'self' *and* 'god' acquires emotional importance even in the absence of either plot-action or credible characters.

In some ways, the *absence* of the space ships, or near-absence actually, in the other two books provides a clearer indication of the significance of their use as symbols. In Simak's novel, space has ceased to represent a frontier; it is real estate, being processed by Forever Center for the eventual reawakening of millions of bodies. All frontiers, physical and spiritual, are barred to this life, postponed to the next. But most impressive of all is Kelly's grounded pseudo-spaceship: an impregnable Rolls Royce, equipped with what amounts to an astronaut's life-system, for all practical earth-bound purposes—carrying its own food and drink and toilet facilities, equipped with defensive and offensive armament, and totally opaque for womb-like privacy.

I think this is only the beginning. I am waiting impatiently to see what will come next: not just the other books undoubtedly on their way already, but the ones we will see *next* year, building on what has been published so far . . .

BOOKS RECEIVED

FICTION

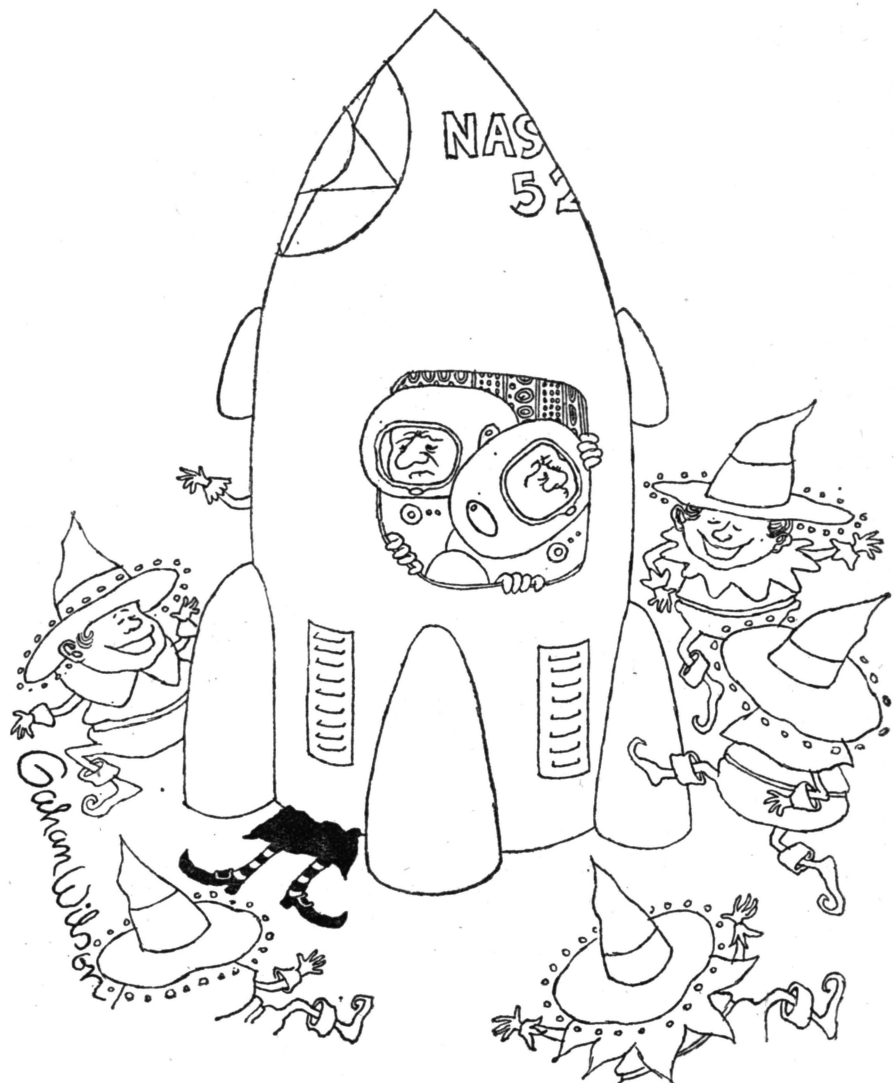
THE ARTIFICIAL MAN, L. P. Davies; Doubleday 1967; 191 pp.; $3.95
ELEMENT 79, Fred Hoyle; New American Library 1967; 180 pp.; $4.50 (15 stories)
NINE BY LAUMER, Keith Laumer; Doubleday 1967; 222 pp.; $3.95
THREE STORIES by Murray Leinster, Jack Williamson and John Wyndham, Doubleday 1967; 184 pp.; $3.95
THE NIGHT SPIDERS, John Lymington; Doubleday 1967; 190 pp.; $3.95
MASTERPIECES OF SCIENCE FICTION, Sam Moskowitz, ed.; World 1967; 552 pp.; $6.50
THE MEN IN THE JUNGLE, Norman Spinrad; Doubleday 1967; 240 pp.; $4.50
THE THIRTY-FIRST FLOOR, Peter Wahloo; Alfred A. Knopf 1967; 207 pp.; $4.95
SECRET OF THE MARAUDER SATELLITE, Ted White; Westminster 1967; 169 pp.; $3.75

GENERAL

TIME, Samuel A. Goudsmit, Robert Claiborne and the Editors of Life; 200 pp.; $3.95 (Available on order from Time-Life Books, Time & Life Building, Chicago, Ill. 60611)
HEALING HANDS, J. Bernard Hutton; David McKay 1967; 201 pp.; $3.95

PAPERBACKS

THE MONITORS, Keith Laumer; Berkley, 60¢
UNCLE SILAS, J. S. Le Fanu; Dover, $2.00
THE STEALER OF SOULS, Michael Moorcock; Lancer, 60¢
TROUBLE ON TITAN, Alan E. Nourse; Lancer, 50¢
THE STAR MILL, Emil Petaja; Ace, 40¢
RECALLED TO LIFE, Robert Silverberg; Lancer, 50¢
SEEDS OF LIFE AND WHITE LILY, John Taine; Dover, $2.00
BEST SCIENCE FICTION STORIES OF H. G. WELLS; Dover, $2.00
THE SORCERESS OF QAR, Ted White; Lancer, 60¢
THE GIRLS FROM PLANET 5, Richard Wilson; Lancer, 60¢



"Ding dong the witch is dead!"

Terry Carr, who wrote several good stories for F&SF in 1962 and 1963, makes a welcome return with this story of young Harrold, a prince both ambitious and penniless but, above all, romantic—who yearned for a time past when things were simpler for princes and was eager to believe in the legends of that time. There are legends and legends . . .

SLEEPING BEAUTY

by Terry Carr

IN THAT LAND WHERE THE DARK leaves seemed to sleep on the trees, hanging still and silent around Harrold as he rode, there was a brown, tangy odor of the past. It curled around him, leather and sweat of horse and the smell of damp earth broken open by shod hoofs. A cool fog rolled down from Mount Rispan, hugging the shoulders of the mountain, spilling over into the gulleys as the hot sun climbed into morning.

Harrold crossed a clattering bridge slowly, his mount picking each footstep. This bridge was long unused, the stones showing grass between and moss on top. He paused for a moment on the other side, looking down into the valley.

From this distance it would have been impossible to pick out any houses if he hadn't seen, here and there, the drifting smears of smoke in the air. Far across the valley, at a point where the river curled back upon itself around a high stone outcropping, stood the castle, dark and empty. No smoke rose anywhere inside its walls, and the fields outside had a blotched, irregular look, even at this distance, which showed them to be untenanted and wild.

So it was true: the house of Bieranthal had fallen. Stories had filtered out to the more civilized world for many years, but most had discredited them. Bieranthal gone? Nonsense. The kings of Bieranthal had ruled for over a thousand years,

with never a single uprising among the serfs, no attempted invasions from neighboring countries—the valley was too small, and too isolated, to make it worthwhile—not even so much as a palace plot to add spice to the succession of kings. It was the most stable kingdom in all Europe.

But a plague— They had spoken of a sudden series of deaths, among the nobles and peasants alike.

Well, perhaps. Bieranthal was a backwater, almost entirely cut off from the rest of Europe. Sanitation was probably nonexistant there. In any case, what did it matter? Forget Bieranthal; nothing happening there could be of any interest to a civilized person.

But Harrold had wondered about Bieranthal. He was, first of all, a romantic who avidly read the chronicles of medieval kings and crusades, of battles and alliances, noble quests and Machiavellian schemes, until he could recite them at will. Europe's feudal past, with its divine right of kings, its lusty peasants and adventurous knights, was his heritage.

This was not only a matter of temperament. Harrold had been born a prince, although a third son of his father the king and therefore not likely to succeed him. His country was not a prosperous one, in any case—it included less than three square miles of land, on which the principal buildings were the palace and a gambling hall, the proceeds of which paid for the palace's servants and fuel to heat those rooms which were still in use. A great pretense of prosperity was maintained, and Harrold had been brought up to believe that even if kings perhaps did not have divine right, they should at the very least behave as though they thought they did.

Harrold took this too much to heart, and before he was sixteen was known as a spendthrift and rake. His father—stern, graying, sad-eyed—had lectured him about *noblesse oblige,* and Harrold had been so delighted with the concept that he had explained it all, in the accents of a burdened noble heart, to two chambermaids and a *nouveau-riche* heiress. Some time later, the fathers of the first two and the attorneys of the latter had explained to him just how nobly indeed he was obliged to the young ladies. His father the king had paid them off and then disinherited Harrold, ending by exiling him from the kingdom.

Which left Harrold in a bad way. What, after all, had a penniless, disfranchised prince to offer the world? How could he even get by? He had been, alas, in jail many times, but owing to his station he had never had to stay longer than overnight, so he had never learned a useful trade. All he knew, actually, was how to act like a prince.

And so he thought of Bieranthal, where the ruling house was reputed

to be in danger of falling, or perhaps to have fallen already. If the former were true—if the dynasty were merely shaky—would not the marriage of one of the Bieranthal princesses with a handsome, civilized prince like Harrold do much to stabilize the ruling house's position with the peasants? And if, indeed, the Bieranthals had fallen and the valley were in anarchy, who could better pick up the reins of power than a noble prince with civilized manners to charm and impress the citizenry?

And so he had come to Bieranthal; and now, as he surveyed the valley, he nodded to himself. Yes, it had the proper air about it: rustic and ancient, an almost forgotten remnant of earlier ages when the world had been a more simple and easy place for princes to live. Harrold felt a sense of belonging here, as though he were not a stranger to these mountains and this high valley, but a native returning after a very long journey.

His chin upthrust nobly and a confident smile touching the corners of his mouth, Harrold spurred his mount forward. Down into the valley he rode, at a leisurely, dignified pace, smelling the crisp, clean air and the tang of mountain evergreens. The Bieranthal peasants would welcome him, Harrold knew. To them he would seem the embodiment of the rich, the exotic, of the decisiveness they expected in a strong ruler who could lead their valley out of whatever darkness had fallen upon it. And decisive he would be, he decided firmly—and rich, and exotic. The wealth would have to come from the people of Bieranthal themselves, but for their taxes they would see pomp and glory at the castle to rival the courts of the great despots of the great days. What matter that the peasants would have to tithe half their produce to him—perhaps two-thirds for the first few years, Harrold reflected, so that he could pay off some back debts—when by their sacrifices a great house would rise again in Europe?

Lost in thoughts and plans, Harrold wended his way through the morning land. The trail he followed led steadily downward, following the rushing stream until it met and joined the river proper. The silence of the mountains was gone now; here where water joined water a soft, steady rippling and foaming filled the air with sound and spray. The trail turned to the right, following the river, and a few hundred yards down Harrold could see another bridge. He walked his horse to it and over it, and found himself at the gate of a rustic cottage.

Pigs rooted in a pen halfway around toward the back. The house was of crude, uneven mudbricks, yet it seemed to be a clean house for all that, as peasant's dwellings went. Harrold wrinkled his nose at a whiff from the pigpen and dismounted.

He was looping the reins about the log fence in front when suddenly the heavy oaken door burst open and a shrill voice snapped, "*Hold, mister!* Hold still, and don't move!"

Harrold wasn't accustomed to being spoken to in such a manner, except by police officials, and this cottage had hardly looked like a precinct house. Besides, wasn't that a redundant way of putting it? "Hold still and don't move" . . . yes, there was a definite redundancy there. He looked up at the speaker with a rebuke forming on his lips, and stared down the bore of a most efficient looking shotgun.

He straightened slowly, perspiration forming on his brow.

The figure behind the shotgun was a woman. Or at least Harrold supposed she was a woman—she wore a dress and long hair, at any rate. The dress was of some coarse, shapeless material, and the hair was gray and stringy. The creature's face was old, rheumy-eyed, snaggle-toothed and pock-marked. (The results of the plague? Harrold wondered. But no: the plague had been recent, and those pits and blotches went back decades.) She was staring at him with narrowed eyes, the gun unwavering.

"Who are ye?" she demanded.

Harrold hesitated, then decided to turn on the charm. His easy, condescending manner had turned the heads of ladies much more sophisticated than this one.

He swept the plumed hat from his head and bowed low to the lady of the shotgun. "My name," he said, "is Harrold. I am a prince by birth, as you may have noticed, and I am come to Bieranthal on a matter of great urgency."

The hag scrutinized him for another moment, then lowered the gun and cackled. "Aye, I'll wager ye are, at that," she said. "I can't see anyone comin' here if it *wasn't* urgent."

Harrold smiled understandingly. "I've heard the valley of Bieranthal has had bad days. I came to see what I could do."

"To help?" she asked; then, her eyes boring into his, she went on, "No, that wasn't what ye said, was it? Ye come to see what ye can do, but ye didn't say for who."

"Why, for the people of the valley," Harrold said. He waved a hand vaguely at the fields and river. "It's a lovely land, and my heart grieves to see it fallen into the shadow of recent days. The very kings of Bieranthal have been struck down, I am told."

"If that's how ye want to put it," she said. She seemed to be considering something as she gazed at him; after a moment, her decision made, she stepped back out of the doorway and said, "Well, come in then."

Harrold smiled, and bowed again, and stepped forward into the cottage. It was dim inside, but he made out a heavy table and chairs,

a fireplace with an iron kettle hung in it, a crude mud-brick oven and, at the other end of the single room, a pallet of animal skins on the hard-packed dirt floor. "Ye can throw yer exter garments there," the hag said. She turned away and went to the table. "I suppose ye'll have a hunger, fresh from the road."

"Indeed I have," Harold said, pleased. He detected in her rough, rustic hospitality faint echoes of the chivalric code of past centuries, when travelers had been received at each household with freely given food and lodging in exchange for news of the lands over the hill, beyond river or canyon pass.

Harrold unwound his cloak from his shoulders and laid it neatly across the pallet. He set his hat atop the cloak, and turned to the table, where the hag was setting out biscuits and ale, which she poured from a freshly unstoppered jug. "It's not wine from the lowlands," she said, "but it's better drink than ye'll find today at the castle."

Harrold bowed yet again before he sat down; the hag raised a dirty-gray eyebrow but held back her comment, if she had any. Harrold took a deep draught from his mug, and quickly put it down, gasping and almost choking. This was indeed no drink for a smooth palate.

To cover his surprise, he said, "Then I take it the castle is empty now that your former rulers are gone."

"Empty, no," the hag said. She took a long swallow from her own mug, sighing with satisfaction as she set it down. "There's snakes and wolves prowling there, though they've no royal blood in 'em—not that it makes much difference. And of course there's the one ye came for."

Harrold blinked. "The one I came for?" he asked.

"Aye. The princess, she that sleeps in the tower. I knew from the first ye was one that come fer her." She leaned forward, looking in his mug, and frowned sharply at him, her forehead tightening into a rough knot of wrinkles and her eyes disappearing into darkness under lowering brows. "Ye're not drinkin'," she said accusingly. "Ye needn't be afraid, young nobleman; it's neither potion nor poison. It only tastes like it should be." She waved a bony finger at his mug, and obediently Harrold raised it again to his lips. But he was careful only to sip, and in small quantities the ale was somewhat more bearable.

"Now then," she said. "The princess. So ye've heard of her, have ye?"

Harrold hesitated, calculating how best to draw her out. "Yes, I've heard of her," he said slowly, "but no more than you've already mentioned—just that she's there, in the tower."

The old crone chuckled softly, like ancient parchment being

wrinkled. "So the story is still travelin' abroad, no doubt becomin' more and more fanciful with each tellin'. Did they say how beautiful she is? Hair jet black like a raven's wing? Skin white and clear as snow that's just fallen? Lips red and full like your lowlands wines? That much is true, at any rate."

Harrold felt his heartbeat speeding up as she spoke. An eligible princess? What better way to cement his claim to the throne of Bieranthal than through such a marriage? And if she were truly as beautiful as the strange hag said . . .

"Mind ye, some o' the other parts o' the story aren't as true," the old woman went on. "Sometimes they say she's imprisoned there in the tower, an' growin' her hair longer each year fer the hope o' lettin' it down through the window so that rescuers can climb up. But she's no prisoner—she's sleepin'. Aye, sleepin' fer many years now, on her silk-hung bed."

Harrold took a somewhat bolder sip of the ale, winced, and asked, "But why does she sleep? Is it the disease that's struck the valley? Some sort of sleeping sickness?"

"Sleepin' sickness!" the hag exclaimed. "There's been no such sickness here! If sickness it was, it was a dyin' sickness. Them that was took by it did no snorin' afterwards." She cackled again, and Harrold felt a bit disquieted at her glee. But she was obviously senile, and probably crazy too. Harrold made a mental note to have her locked up as soon as he took power.

The crone went on, "No, what's got her took her years and years ago, before any of the deaths ye've heard of. Long she's slept there, mourned by her family and the common folk alike. But them that mourned her have died, while she lives on, asleep—there's a taste of irony, if ye've a palate for it." She chuckled again, and drank.

But Harrold was not to be put off by an old hag's digressions. He strove to take command of the conversation. "If not the sickness, then, what else could it be that she has? You put me in mind of superstitious tales of enchanted princesses, madam—maids with spells cast upon them, who must wait for a handsome young prince to come and—"

She broke in with a sharp, loud laugh that grated against the marrow of his bones. "Ah! Ah, but that's it, brave lad! Didn't I say to ye first thing that she's waitin' fer ye? The princess of the Bieranthals, the last of a noble family—sleepin' so rich an' fair there 'pon her soft bed, her milk-white hands folded 'cross her breast. Go to her, young prince! Go to her!"

Harrold's imagination leapt at these words, as all the romantic tales he'd read during his bitter youth in a half empty, false-front palace surged into memory. *And the handsome prince beheld her, and she was fair beyond imagining*

. . . he kissed her cold lips, and felt them tremble . . . breath quickened within her, and her eyes fluttered open . . . and there was a great ball, and all those in the kingdom came to it and cheered the prince and princess. . . . And, of course, they lived happily ever after.

Could it be? Even in this isolated valley where the magic aura of the past was in the very air, where he had felt a sense of destiny as he had looked down from the pass, could he believe in such a thing? Excited, his blood pounding in his temples, Harrold took an even stronger draught of his ale, and hardly felt the shudder that ran reflexively through him. The hag was right—there were many different stories about enchanted princesses, stories which agreed in most of the essentials. Especially about the essential of the handsome prince who must free her from her ensorcelment. Might not those stories be variations on one original truth which had been warped with the passage of time? Was it not a tenet of scholars that folk legends were based on some forgotten truth?

And so now Harrold, full blooded prince of a royal house, had come to the long-forgotten land where a fabled princess slept under a spell. He drew a deep breath and raised his head proudly, knowing that his eyes must be glinting the color of steel in the firelight.

"The princess," he said, a trifle thickly.

The aged crone refilled his mug of ale, laughing deep in her bony chest. "Aye, the princess that sleeps in the tower. Waitin' fer you."

It was dusk when Harrold reached the castle. Low clouds had gathered over the mountains to the east, and a wind was blowing them swiftly overhead now. Looking up at the battlements of Bieranthal Castle with the dark clouds passing above them, Harrold imagined he could feel the world turning, time passing, decades and centuries settling like silt upon the castle and grounds. For this was a very ancient place: the stones of the walls, scarred and weatherworn, showed that plainly, and the silence, broken only by the moaning of the wind, seemed to echo the years.

Harrold lowered his gaze from the moving sky and shook his head in an effort to clear it. He was still a bit fuzzy from the hag's ale, and the almost hypnotic effect of racing clouds low over the castle had numbed him. But in a few moments he felt steadier, and he walked his horse on through the open castle gate and into the courtyard.

Here there was only dust and shadow. The heavy door to what had been the smithy stood open and swinging slowly in the wind. Deep ruts from wagonwheels led into the courtyard and disappeared in their own profusion. Drifts of dust had blown up against the west walls

where fragments of market stalls lay. Harrold dismounted and tethered his horse in the deserted stables, then walked around to the main gate to the castle proper. He entered.

As he made his way through the dim, empty halls, noting fallen hangings and overturned tables, he felt his excitement mounting once more. The very decadence of the place, the deserted, forlorn aspect of it, touched the deepest wellsprings of ambition in him. When he was acknowledged king of Bieranthal, he would rebuild here. The halls and rooms would be cleaned and hung once more with rich tapestries; the facings of the outer walls would be repaired, the battlements inlaid with gold that would gleam proudly in the sun. It would be costly, of course, but no matter —the peasants and tradesmen would pay the price, not he. An advantage of being a penniless prince, he thought, smiling—he would not need to spend his personal fortune on things which were, after all, matters of state. He *had* no personal fortune . . . except that which he would extract from his subjects.

The little people of the world never realize how dependent upon them we are, he thought. *We're parasites, sucking their blood to maintain ourselves.* Then he frowned, annoyed at his own simile. *No, not parasites . . . carnivores. The kings made by natural law . . . feared by the weak, fed by the slow of foot and the slow of mind.*

Above him, in the tower, was the princess whose hand would give him an unbreakable grip on the kingdom.

He reached the stairs leading to the high tower and started to climb, marveling at the way everything had proven to be exactly as the hag had described it. He had begun, despite himself, to doubt her tale of sorcery and his own destiny here, but as one detail after another in her description of the castle proved true, the chain of evidence grew stronger.

Besides, he could feel the air of magic himself, in these halls and this stairwell in particular. This was the path for which his whole life had been a preparation.

Four times he had to pause to catch his breath before he finally reached the chamber at the top of the stairs. It was fully dark by now, so that he had to strike a match to see his way. He saw an oaken door before him, but it swung inward at his touch—and then he saw the princess for the first time.

She lay on a canopied bed with silken hangings drawn halfway back. Beyond her, across the dark room, a window opened onto the night sky, so that she was silhouetted against a wash of stars. He paused in the doorway, awed at the unexpected intensity of the beauty before him.

Then hesitantly he stepped for-

ward, afraid suddenly that at this last moment it would all prove unreal: that when he drew back the silk hangings they would crumble into dust at his touch, that when he saw her face it would be a macabre skull that had lain here undisturbed for centuries. But the hangings did not crumble, and when he sat beside her and looked upon her face in the starlight it was as lovely as the hag had said.

Her hair was black, spread in soft waves on the pillow. Her skin was white as the stars themselves, and her lips were full, red and inviting. He marveled at the graceful perfection of her features, the delicate flare of her nostrils, the serenity of her expression in sleep. As though she were waiting for something she knew would come . . . waiting for him.

He removed his plumed hat and bent over her, wondering at her milk-white skin. It was not simply a clear complexion; it was a pallor from many months or years out of the sun. She must have lain in sleep for a very long time. But in a moment she would waken and live again.

He kissed her.

And it was just as he had imagined it would be: her cold, delicate lips trembling under his, her eyes fluttering open in wonderment, then her arms raising and gently encircling his neck as their lips clung for a moment. Then he drew back a little and smiled, and as she returned his smile he saw the incredibly sharp little teeth that were suddenly reaching for his throat. And she kept her arms around him for a long, long time.

Conventions

New York—The 10th Annual Lunacon s-f Conference will be held Saturday and Sunday, April 29 and 30, at the Roosevelt hotel, Madison Avenue and 45 Street in New York. James Blish will be the guest of honor, and admission will be $2.00 at the door.

Cincinnati—The 18th Annual Midwestcon will be held on June 23, 24, and 25, at the North Plaza Motel, 7911 Reading Road, Cincinnati.

The 25th World Science Fiction Convention will be held September 1-4, in New York City. More details in a later issue.

There are several schools of thought about automobile safety. We stand with those who support the re-enactment of an 1865 Act of Parliament, limiting the speed of all road locomotives to four miles an hour in the country and two miles an hour in town, and further providing that a man with a red flag had to walk sixty yards in front. However, those of you who feel that more responsibility rests with the manufacturers of the terrible engines may find some support in this not entirely serious account of Larry Niven's.

SAFE AT ANY SPEED

by Larry Niven

But how, you ask, *could a car have managed to fail me?*

Already I can see the terror in your eyes at the thought that your car, too, might fail. Here you are with an indefinite life-span, a potentially immortal being, taking every possible precaution against the abrupt termination of your godhead, and all for nothing. The disruptor field in your kitchen dispose-all could suddenly expand to engulf you. Your transfer booth could make you disappear at the transmitter and forget to deliver you at the receiver. A slidewalk could accelerate to one hundred miles per hour, then slew sideways to throw you against a building. Every boosterspice plant in the Thousand Worlds could die overnight, leaving you to grow old and grey and wrinkled and arthritic. No, it's never happened in human history; but if a man can't trust his *car,* fa'Pete's sake, what *can* he trust?

Rest assured, reader, it wasn't that bad.

For one thing, it all happened on Margrave, a world in the first stages of colonisation. I was twenty minutes out of Triangle Lake on my way to the Wiggly River logging region, flying at an altitude of a thousand feet. For several days the logging machines had been cutting trees which were too young, and a mechanic was needed to alter a few settings in the boss brain. I

was cruising along on autopilot, playing double-deck complex solitaire in the back seat, with the camera going so that just in case I won one I'd have a film to back up my bragging.

Then a roc swooped down on me, wrapped ten huge talons around my car, and swallowed it.

Right away you'll see that it couldn't happen anywhere but Margrave. In the first place, I wouldn't have been using a car for a two-hour trip on any civilized world. I'd have taken a transfer booth. In the second place, where else can you find rocs?

Anyway, this big damn bird caught me and ate me, and everything went dark. The car flew blithely on, ignoring the roc, but the ride became turbulent as the roc tried to fly away and couldn't. I heard grinding sounds from outside. I tried my radio and got nothing. Either it couldn't reach through all that meat around me, or the trip through the bird's gullet had brushed away my antennae.

There didn't seem to be anything else I could do. I turned on the cabin lights and went on with the game. The grinding noises continued, and now I could see what was causing them. At some time the roc had swallowed several boulders, for the same reason a chicken swallows grit: to help digestion. The rocks were rubbing against the car under peristalsis, trying to break it down into smaller pieces for the murky digestive juices to work on.

I wondered how smart the boss brain was. When it saw a roc glide in for a landing at the logging camp, and when it realised that the bird was incapable of leaving no matter how it shrieked and flapped its wings, would the master computer draw the correct conclusion? Would it realise the bird had swallowed a car? I was afraid not. If the boss brain were that smart it would have been in business for itself.

I never found out. All of a sudden my seat coccoon wrapped itself around me like an overprotective mother, and there was a meaty three-hundred-mile-per-hour Smack!

The coccoon unwrapped itself. My cabin lights still showed red-lit fluid around me, but it was getting redder. The boulders had stopped rolling around. My cards were all over the cabin, like a snowstorm.

Obviously I'd forgotten one teensy little mountain when I programmed the autopilot. The roc had been blocking the radar and sonar, with predictable results. A little experimenting showed that my drive had failed under the impact, my radio still wouldn't work, and my emergency flares refused to try to fire through a roc's belly.

There was no way to get out, not without opening my door to a flood of digestive juices. I could have done that if I'd had a vac suit, but

how was I to know I'd need one on a two hour car trip?

There was only one thing to do.

I collected my cards, shuffled and started a new game.

It was half a year before the roc's corpus decomposed enough to let me out. In that time I won five games of double complex solitaire. I've only got films for four; the camera ran out. I'm happy to say that the emergency foodmaker worked beautifully if a little monotonously, the airmaker never failed, and the clock-TV kept perfect time as a clock. As a TV it showed only technicolor ripples of static. The washroom went out along about August, but I got it fixed without much trouble. At 2:00 P.M. on October 24th I forced the door open, hacked my way through the mummified skin and flesh between a couple of roc ribs, and took a deep breath of real air. It smelled of roc. I'd left the cabin door open, and I could hear the airmaker whine crazily as it tried to absorb the smell.

I fired off a few flares, and fifteen minutes later a car dropped to take me home. They say I was the hairiest human being they'd ever seen. I've since asked Mr. Dickson, the president of General Transportation, why he didn't think to include a depil tube in the emergency stores.

"A castaway is supposed to look like a castaway," he tells me. "If you're wearing a year's growth of hair, your rescuer will know immediately that you've been lost for some time and will take the appropriate steps."

General Transportation has paid me a more than adequate sum in compensation for the fact that my car was unable to handle a roc. (I've heard that they're changing the guarantees for next year's model.) They've promised me an equal sum for writing this article. It seems there are strange and possibly damaging rumors going around concerning my delayed arrival at Wiggly River.

Rest assured, reader. I not only lived through the accident without harm, but came out of it with a substantial profit. Your car is perfectly safe, provided it was built later than 3100 A.D.

It is in the nature of the space program that its remarkable technical achievements and discoveries tend, most of the time, to overshadow the human drama. The recent death of three astronauts was a tragic reminder of how closely the two are intermingled. —As they are in this story, which in a few years may not be science fiction.

FIFTEEN MILES

by Ben Bova

Sen. Anderson: Does that mean that man's mobility on the moon will be severely limited?

Mr. Webb: Yes, Sir; it is going to be severely limited, Mr. Chairman. The moon is a rather hostile place . . .

U.S. Senate Hearings on National Space Goals, 23 August 1965

"ANY WORD FROM HIM YET?"

"Huh? No, nothing."

Kinsman swore to himself as he stood on the open platform of the little lunar rocket jumper.

"Say, where are you now?" The astronomer's voice sounded gritty with static in Kinsman's helmet earphones.

"Up on the rim. He must've gone inside the damned crater."

"The rim? How'd you get . . ."

"Found a flat spot for the jumper. Don't think I walked this far, do you? I'm not as nutty as the priest."

"But you're supposed to stay down here on the plain! The crater's off-limits."

"Tell it to our holy friar. He's the one who marched up here. I'm just following the seismic rigs he's been planting every three-four miles."

He could sense Bok shaking his head. "Kinsman, if there're twenty officially-approved ways to do a job, you'll pick the twenty-second."

"If the first twenty-one are lousy."

"You're not going inside the crater, are you? It's too risky."

Kinsman almost laughed. "You think sitting in that aluminum casket of ours is *safe?*"

The earphones went silent. With a scowl, Kinsman wished for the tenth time in an hour that he could scratch his twelve-day beard. *Get zipped into the suit and the itches start.* He didn't need a mirror to know that his face was haggard, sleepless, and his black beard was mean looking.

He stepped down from the jumper—a rocket motor with a railed platform and some equipment on it, nothing more—and planted his boots on the solid rock of the ringwall's crest. With a twist of his shoulders to settle the weight of the pressure-suit's bulky backpack, he shambled over to the packet of seismic instruments and florescent marker that the priest had left there.

"He came right up to the top, and now he's off on the yellow brick road, playing moon explorer. Stupid bastard."

Reluctantly, he looked into the crater Alphonsus. The brutally short horizon cut across its middle, but the central peak stuck its worn head up among the solemn stars. Beyond it was nothing but dizzying blackness, an abrupt end to the solid world and the beginning of infinity.

Damn the priest! God's gift to geology . . . and I've got to play guardian angel for him.

"Any sign of him?"

Kinsman turned back and looked outward from the crater. He could see the lighted radio mast and squat return rocket, far below on the plain. He even convinced himself that he saw the mound of rubble marking their buried base shelter, where Bok lay curled safely in his bunk. It was two days before sunrise, but the Earthlight lit the plain well enough.

"Sure," Kinsman answered. "He left me a big map with an X to mark the treasure."

"Don't get sore at me!"

"Why not? You're sitting inside. I've got to find our fearless geologist."

"Regulations say one man's got to be in the base at all times."

But not the same one man, Kinsman flashed silently.

"Anyway," Bok went on, "he's got a few hours' oxygen left. Let him putter around inside the crater for a while. He'll come back."

"Not before his air runs out. Besides, he's officially missing. Missed two check-in calls. I'm supposed to scout his last known position. Another of those sweet regs."

Silence again. Bok didn't like being alone in the base, Kinsman knew.

"Why don't you come on back," the astronomer's voice returned, "until he calls in. Then you can

get him with the jumper. You'll be running out of air yourself before you can find him inside the crater."

"I'm supposed to try."

"But why? You sure don't think much of him. You've been tripping all over yourself trying to stay clear of him when he's inside the base."

Kinsman suddenly shuddered. *So it shows! If you're not careful you'll tip them both off.*

Aloud he said, "I'm going to look around. Give me an hour. Better call Earthside and tell them what's going on. Stay in the shelter until I come back." *Or until the relief crew shows up.*

"You're wasting your time. And taking an unnecessary chance."

"Wish me luck," Kinsman answered.

"Good luck. I'll sit tight here."

Despite himself, Kinsman grinned. Shutting off the radio, he said to himself, "I know damned well you'll sit tight. Two scientific adventurers. One goes over the hill and the other stays in his bunk two weeks straight."

He gazed out at the bleak landscape, surrounded by starry emptiness. Something caught at his memory:

"They can't scare me with their empty spaces," he muttered. There was more to the verse but he couldn't recall it.

"Can't scare me," he repeated softly, shuffling to the inner rim. He walked very carefully and tried, from inside the cumbersome helmet, to see exactly where he was placing his feet.

The barren slopes fell away in gently terraced steps until, more than half a mile below, they melted into the crater floor. *Looks easy . . . too easy.* With a shrug that was weighted down by the pressure suit, Kinsman started to descend into the crater.

He picked his way across the gravelly terraces and crawled feet first down the breaks between them. The bare rocks were slippery and sometimes sharp. Kinsman went slowly, step by step, trying to make certain he didn't puncture the aluminized fabric of his suit.

His world was cut off now and circled by the dark rocks. The only sounds he knew were the creakings of the suit's joints, the electrical hum of its motor, the faint whir of the helmet's air blower, and his own heavy breathing. Alone, all alone. A solitary microcosm. One living creature in the one universe.

They cannot scare me with their empty spaces.
Between stars—on stars where no human race is.

There was still more to it: the tag line that he couldn't remember.

Finally he had to stop. The suit was heating up too much from his exertion. He took a marker beacon from the backpack and planted it on the broken ground. The moon's soil, churned by meteors and whipped into a frozen froth, had an unfinished look about it, as

though somebody had been black topping the place but stopped before he could apply the final smoothing touches.

From a pouch on his belt Kinsman took a small spool of wire. Plugging one end into the radio outlet on his helmet, he held the spool at arm's length and released the catch. He couldn't see it in the dim light, but he felt the spring fire the wire antenna a hundred yards or so upward and out into the crater.

"Father Lemoyne," he called as the antenna drifted in the moon's easy gravity. "Father Lemoyne, can you hear me? This is Kinsman."

No answer.

Okay. Down another flight.

After two more stops and nearly an hour of sweaty descent, Kinsman got his answer.

"Here . . . I'm here . . . "

"Where?" Kinsman snapped. "Do something. Make a light."

". . . can't . . ." The voice faded out.

Kinsman reeled in the antenna and fired it out again. "Where the hell are you?"

A cough, with pain behind it. "Shouldn't have done it. Disobeyed. And no water, nothing . . ."

Great! Kinsman frowned. *He's either hysterical or delirious. Or both.*

After firing the spool antenna again, Kinsman flicked on the lamp atop his helmet and looked at the radio direction-finder dial on his forearm. The priest had his suit radio open and the carrier beam was coming through even though he was not talking. The gauges alongside the radio-finder reminded Kinsman that he was about halfway down on his oxygen, and more than an hour had elapsed since he had spoken to Bok.

"I'm trying to zero in on you," Kinsman said. "Are you hurt? Can you . . ."

"Don't, don't, don't. I disobeyed and now I've got to pay for it. Don't trap yourself too . . ." The heavy, reproachful voice lapsed into a mumble that Kinsman couldn't understand.

Trapped. Kinsman could picture it. The priest was using a canister-suit: a one-man walking cabin, a big plexidomed rigid can with flexible arms and legs sticking out of it. You could live in it for days at a time—but it was too clumsy for climbing. Which is why the crater was off-limits.

He must've fallen and now he's stuck.

"The sin of pride," he heard the priest babbling. "God forgive us our pride. I wanted to find water; the greatest discovery a man can make on the moon. . . . Pride, nothing but pride . . ."

Kinsman walked slowly, shifting his eyes from the direction finder to the roiled, pocked ground underfoot. He jumped across an

eight-foot drop between terraces. The finder's needle snapped to zero.

"Your radio still on?"

"No use . . . go back . . ."

The needle stayed fixed. *Either I busted it or I'm right on top of him.*

He turned full circle, scanning the rough ground as far as his light could reach. No sign of the canister. Kinsman stepped to the terrace edge. Kneeling with deliberate care, so that his backpack wouldn't unbalance and send him sprawling down the tumbled rocks, he peered over.

In a zigzag fissure a few yards below him was the priest, a giant armored insect gleaming white in the glare of the lamp, feebly waving its one free arm.

"Can you get up?" Kinsman saw that all the weight of the cumbersome suit was on the pinned arm. *Banged up his backpack too.*

The priest was mumbling again. It sounded like Latin.

"Can you get up?" Kinsman repeated.

"Trying to find the secrets of natural creation . . . storming heaven with rockets. . . . We say we're seeking knowledge, but we're really after our own glory . . ."

Kinsman frowned. He couldn't see the older man's face, behind the canister's heavily-tinted window.

"I'll have to get the jumper."

The priest rambled on, coughing spasmodically. Kinsman started back across the terrace.

"Pride leads to death," he heard in his earphones. "You know that, Kinsman. It's pride that makes us murderers."

The shock boggled Kinsman's knees. He turned, trembling. "What . . . did you say?"

"It's hidden. The water is here, hidden . . . frozen in fissures. Strike the rock and bring forth water . . . like Moses. Not even God himself was going to hide this secret from me . . ."

"What did you say," Kinsman whispered, completely cold inside, "about murder?"

"I know you, Kinsman . . . anger and pride. . . . Destroy not my soul with men of blood . . . whose right hands are . . . are . . ."

Kinsman ran away. He fought back toward the crater rim, storming the terraces blindly, scrabbling up the inclines with four-yard-high jumps. Twice he had to turn up the air blower in his helmet to clear the sweaty fog from his faceplate. He didn't dare stop. He raced on, his heart pounding until he could hear nothing else.

But in his mind he still saw those savage few minutes in orbit, when he had been with the Air Force, when he became a killer. He had won a medal for that secret mission; a medal and a conscience that never slept.

Finally he reached the crest. Collapsing on the deck of the jumper, he forced himself to breath normally again, forced himself to sound normal as he called Bok.

The astronomer said guardedly, "It sounds as though he's dying."

"I think his regenerator's shot. His air must be pretty foul by now."

"No sense going back for him, I guess."

Kinsman hesitated. "Maybe I can get the jumper down close to him." *He found out about me.*

"You'll never get him back in time. And you're not supposed to take the jumper near the crater, let alone inside of it. It's too dangerous."

"You want to just let him die?" *He's hysterical. If he babbles about me where Bok can hear it . . .*

"Listen," the astronomer said, his voice rising, "you can't leave me stuck here with both of you gone! I know the regulations, Kinsman. You're not allowed to risk yourself or the third man on the team to help a man in trouble."

"I know. I know." *But it wouldn't look right for me to start minding regulations now. Even Bok doesn't expect me to.*

"You don't have enough oxygen in your suit to get down there and back again," Bok insisted.

"I can tap some from the jumper's propellant tank."

"But that's crazy! You'll get yourself stranded!"

"Maybe." *It's an Air Force secret. No discharges; just transferred to the space agency. If they find out about it now, I'll be finished. Everybody'll know. No place to hide . . . newspapers, TV, everybody!*

"You're going to kill yourself over that priest. And you'll be killing me too!"

"He's probably dead by now," Kinsman said. "I'll just put a marker beacon there, so another crew can get him when the time comes. I won't be long."

"But the regulations . . ."

"They were written Earthside. The brass never planned on something like this. I've got to go back, just to make sure."

He flew the jumper back down the crater's inner slope, leaning over the platform railing to see his marker beacons as well as listening to their tinny radio beeping. In a few minutes, he was easing the spraddle-legged platform down on the last terrace before the helpless priest.

"Father Lemoyne."

Kinsman stepped off the jumper and made it to the edge of the fissure in four lunar strides. The white shell was inert, the lone arm unmoving.

"Father Lemoyne!"

Kinsman held his breath and listened. Nothing . . . wait . . . the faintest, faintest breathing. More like gasping. Quick, shallow, desperate.

"You're dead," Kinsman heard himself mutter. "Give it up, you're finished. Even if I got you out of here, you'd be dead before I could get you back to the base."

The priest's faceplate was opaque to him; he only saw the reflected spot of his own helmet lamp. But his mind filled with the shocked face he once saw in another visor, a face that had just realized it was dead.

He looked away, out to the too-close horizon and the uncompromising stars beyond. Then he remembered the rest of it:

They cannot scare me with their empty spaces
Between stars—on stars where no human race is.
I have it in me so much nearer home
To scare myself with my own desert places.

Like an automaton, Kinsman turned back to the jumper. His mind was blank now. Without thought, without even feeling, he rigged a line from the jumper's tiny winch to the metal lugs in the canister-suit's chest. Then he took apart the platform railing and wedged three rejoined sections into the fissure above the fallen man, to form a hoisting angle. Looping the line over the projecting arm, he started the winch.

He climbed down into the fissure and set himself as solidly as he could on the bare, scoured smooth rock. Grabbing the priest's armored shoulders, he guided the oversized canister up from the crevice, while the winch strained silently.

The railing arm gave way when the priest was only partway up, and Kinsman felt the full weight of the monstrous suit crush down on him. He sank to his knees, gritting his teeth to keep from crying out.

Then the winch took up the slack. Grunting, fumbling, pushing, he scrabbled up the rocky slope with his arms wrapped halfway round the big canister's middle. He let the winch drag them to the jumper's edge, then reached out and shut off the motor.

With only a hard breath's pause, Kinsman snapped down the suit's supporting legs, so the priest could stay upright even though unconscious. Then he clambered onto the platform and took the oxygen line from the rocket tankage. Kneeling at the bulbous suit's shoulders, he plugged the line into its emergency air tank.

The older man coughed once. That was all.

Kinsman leaned back on his heels. His faceplate was fogging over again, or was it fatigue blurring his sight?

The regenerator was hopelessly smashed, he saw. *The old bird must've been breathing his own juices.* When the emergency tank registered full, he disconnected the oxygen line and plugged it into a fitting below the regenerator.

"If you're dead, this is probably going to kill me too," Kinsman said. He purged the entire suit, forcing the contaminating fumes out and replacing them with the oxygen that the jumper's rocket needed to get them back to the base.

He was close enough now to see through the canister's tinted visor. The priest's face was grizzled, eyes closed. Its usual smile was gone; the mouth hung open limply.

Kinsman hauled him up onto the rail-less platform and strapped him down on the deck. Then he went to the controls and inched the throttle forward just enough to give them the barest minimum of lift.

The jumper almost made it to the crest before its rocket died and bumped them gently on one of the terraces. There was a small emergency tank of oxygen that could have carried them a little further, Kinsman knew. But he and the priest would need it for breathing.

"Wonder how many Jesuits have been carried home on their shields?" he asked himself as he unbolted the section of decking that the priest was lying on. By threading the winch line through the bolt holes, he made a sort of sled, which he carefully lowered to the ground. Then he took down the emergency oxygen tank and strapped it to the deck-section, too.

Kinsman wrapped the line around his fists and leaned against the burden. Even in the moon's light gravity, it was like trying to haul a truck.

"Down to less than one horsepower," he grunted, straining forward.

For once he was glad that the scoured rocks had been smoothed clean by micrometeors. He would climb a few steps, wedge himself as firmly as he could, and drag the sled up to him. It took a painful half-hour to reach the ringwall crest.

He could see the base again, tiny and remote as a dream. "All downhill from here," he mumbled.

He thought he heard a groan.

"That's it," he said, pushing the sled over the crest, down the gentle outward slope. "That's it. Stay with it. Don't you die on me. Don't put me through this for nothing!"

"Kinsman!" Bok's voice. "Are you all right?"

The sled skidded against a yard-high rock. Scrambling after it, Kinsman answered, "I'm bringing him in. Just shut up and leave us alone. I think he's alive. Now stop wasting my breath."

Pull it free. Push to get it started downhill again. Strain to hold it back . . . don't let it get away from you. Haul it out of craterlets. Watch your step, don't fall.

"Too damned much uphill in this downhill."

Once he sprawled flat and knocked his helmet against the edge of the improvised sled. He

must have blacked out for a moment. Weakly, he dragged himself up to the oxygen tank and refilled his suit's supply. Then he checked the priest's suit and topped off his tank.

"Can't do that again," he said to the silent priest. "Don't know if we'll make it. Maybe we can. If neither one of us has sprung a leak. Maybe . . ."

Time slid away from him. The past and future dissolved into an endless now, a forever of pain and struggle, with the heat of his toil welling up in Kinsman drenchingly.

"Why don't you say something?" Kinsman panted at the priest. "You can't die. Understand me? You can't die! I've got to explain it to you . . . I didn't mean to kill her. I didn't even know she was a girl. You can't tell, can't even see a face until you're too close. She must've been just as scared as I was. She tried to kill me. I was inspecting their satellite . . . how'd I know their cosmonaut was a scared kid. I could've pushed her off, didn't have to kill her. But the first thing I knew I was ripping her air lines open. I didn't know she was a girl, not until it was too late. It doesn't make any difference, but I didn't know it, I didn't know . . ."

They reached the foot of the ringwall and Kinsman dropped to his knees. "Couple more miles now . . . straightaway . . . only a couple more . . . miles." His vision was blurred, and something in his head was buzzing angrily.

Staggering to his feet, he lifted the line over his shoulder and slogged ahead. He could just make out the lighted tip of the base's radio mast.

"Leave him, Chet," Bok's voice pleaded from somewhere. "You can't make it unless you leave him!"

"Shut . . . up."

One step after another. Don't think, don't count. Blank your mind. Be a mindless plow horse. Plod along, one step at a time. Steer for the radio mast. . . . Just a few . . . more miles.

"Don't die on me. Don't you . . . die on me. You're my ticket back. Don't die on me, priest . . . don't die . . ."

It all went dark. First in spots, then totally. Kinsman caught a glimpse of the barren landscape tilting weirdly, then the grave stars slid across his view, then darkness.

"I tried," he heard himself say in a far, far distant voice. "I tried."

For a moment or two he felt himself falling, dropping effortlessly into blackness. Then even that sensation died and he felt nothing at all.

A faint vibration buzzed at him. The darkness started to shift, turn gray at the edges. Kinsman opened his eyes and saw the low, curved ceiling of the underground base.

The noise was the electrical machinery that lit and warmed and brought good air to the tight little shelter.

"You okay?" Bok leaned over him. His chubby face was frowning worriedly.

Kinsman weakly nodded.

"Father Lemoyne's going to pull through," Bok said, stepping out of the cramped space between the two bunks. The priest was awake but unmoving, his eyes staring blankly upward. His canister-suit had been removed and one arm was covered with a plastic cast.

Bok explained. "I've been getting instructions from the Earthside medics. They're sending a team up; should be here in another thirty hours. He's in shock, and his arm's broken. Otherwise he seems pretty good . . . exhausted, but no permanent damage."

Kinsman pulled himself up to a sitting position on the bunk and leaned his back against the curving metal wall. His helmet and boots were off, but he was still wearing the rest of his pressure suit.

"You went out and got us," he realized.

Bok nodded. "You were only about a mile away. I could hear you on the radio. Then you stopped talking. I had to go out."

"You saved my life."

"And you saved the priest's."

Kinsman stopped a moment, remembering. "I did a lot of raving out there, didn't I?"

"Any of it intelligible?"

Bok wormed his shoulders uncomfortably. "Sort of. It's, uh . . . it's all on the automatic recorder, you know. All conversations. Nothing I can do about that."

That's it. Now everybody knows.

"You haven't heard the best of it, though," Bok said. He went to the shelf at the end of the priest's bunk and took a little plastic container. "Look at this."

Kinsman took the container. Inside was a tiny fragment of ice, half melted into water.

"It was stuck in the cleats of his boots. It's really water! Tests out okay, and I even snuck a taste of it. It's water all right."

"He found it after all," Kinsman said. "He'll get into the history books now." *And he'll have to watch his pride even more.*

Bok sat on the shelter's only chair. "Chet, about what you were saying out there . . ."

Kinsman expected tension, but instead he felt only numb. "I know. They'll hear the tapes Earthside."

"There've been rumors about an Air Force guy killing a cosmonaut during a military mission, but I never thought . . . I mean . . ."

"The priest figured it out," Kinsman said. "Or at least he guessed it."

"It must've been rough on you," Bok said.

"Not as rough as what happened to her."

"What'll they do about you?"

Kinsman shrugged. "I don't know. It might get out to the press. Probably I'll be grounded. Unstable. It could be nasty."

"I'm . . . sorry." Bok's voice tailed off helplessly.

"It doesn't matter."

Surprised, Kinsman realized that he meant it. He sat straight upright. "It doesn't matter anymore. They can do whatever they want to. I can handle it. Even if they ground me and throw me to the newsmen . . . I think I can take it. I did it, and it's over with, and I can take what I have to take."

Father Lemoyne's free arm moved slightly. "It's all right," he whispered hoarsely. "It's all right."

The priest turned his face toward Kinsman. His gaze moved from the astronaut's eyes to the plastic container, still in Kinsman's hands. "It's all right," he repeated, smiling. Then he closed his eyes and his face relaxed into sleep. But the smile remained, strangely gentle in that bearded, haggard face; ready to meet the world or eternity.

THE RED SHIFT

by Ted Thomas

CHRISTIAN DOPPLER DID A great job of association; no sooner had he discovered in 1842 that sound from a receding object has a longer wavelength than sound from a stationary object, than he began to wonder if the same effect might exist with light waves. He suggested that the different colors of stars might be due to their different radial movements.

Six years later, William Huggins measured the wavelengths of spectral lines from Sirius. The lines were displaced one ten-thousandth of the wavelength of the same lines produced in the laboratory. Thus was the Red Shift born. By applying Doppler's formula, Huggins calculated that Sirius was receding from Earth at a speed one ten-thousandth that of light.

The American astronomer Hubble got into the act. He tied in the Red Shift with actual distances by comparing the brightness of stars in distant galaxies with nearby and well known stars. And so the Red Shift became an indispensable tool for determining both velocities and distances of distant stellar objects.

There came the day when a Red Shift greater than one was discovered. That meant that the object was travelling at a velocity greater than that of light, an impossibility according to the theory of Special Relativity. Then the discovery of the Quasars forced the astronomers to face up to objects that were impossibly brilliant or fantastically distant. Yet radio astronomy indicated that the Quasars were not very far away after all. So Hubble's law was up for grabs.

There is now serious question as to the validity of the meaning of the Red Shift. Perhaps it is not a manifestation of Doppler's law. The question is then, what is it?

Maybe the time has come to look into the origin of light itself. Earthly experimentation and observation cannot really explain

light generation on a white dwarf or a red giant. Perhaps it is better to question the nature of light generation than to accept the dilemmas of the Red Shift. And if Doppler's, Hubble's, and Einstein's theories require some modification, let's get on with it.

Our usual search for information about authors new to these pages has this time yielded only these spare details: Monica Sterba is young; she is now living in Turkey with her husband; she has had stories in Harper's *and* The Reporter. *And that is all. We are not, however, inclined to press our search further. There is a certain richness in mystery, as this superior story so rewardingly demonstrates.*

CYPRIAN'S ROOM

by Monica Sterba

HILDA WENDEL

THE HOUSE I LIVED IN LOOKED so right from the outside. It had the proper aura of faded elegance; it had quizzical gables and tall brooding windows. Besides being all I could afford, it seemed a house where extraordinary people might live. There should have been, I thought, an eccentric, elegantly faded landlady, writing interminable memoirs, who would fill the house with other eccentrics; her charming disreputable nephew, letting dazzling aphorisms fall like pearls in his aunt's moth-eaten salon; other clever young men, aspiring poets and painters; a gifted musician whose flutings or fiddlings would drift up deliciously through the cold radiators; a silver-haired, beautifully dressed gentleman of reduced circumstances and venerable age, who in the bloom of his youth had been the subject of a famous portrait or a famous scandal and perhaps one of our landlady's distinguished lovers . . .

But for me there was merely greasy upholstery and tattered carpeting. No delightful eccentric landlady but a landlord whose only saving grace was that he appeared so seldom, a squat little man with reeking cigars and the harrassed air of someone stuck at the lowest

end of the real estate business. As for the other tenants, they seemed mostly to be poor but hearty Irish waitresses. They were out most of the time, working furiously to save money for a better life back home. Sometimes, late at night or on Sunday, they had male friends in, and then beery harmonica music drifted up through the cold radiators.

In other respects as well, the city I had dreamt of through my small-town student years was eluding me. My job was routine and dull. Among the few people I had met was not one I really wanted to know. The poems I wrote secretly, in painstaking elation, were rejected by every little and littler magazine to which I sent them.

But the city had compensations. I wandered happily through the museums and art galleries. I joined a private library and spent whole Saturdays among the stacks of dusty books, enjoying not only the odd things I found to read but, though I never spoke to them, the presence of the frail distinguished old men who haunted the place, silver-haired and beautifully dressed. Sometimes, of course, I made efforts to break out of all this and live in the present. It was after one of them, a noisy party where I had spent an hour miserably sandwiched on a couch between people who talked across me, that I came home to find all the Irish girls on the staircase, terribly agitated. I asked what was wrong. It was Isabel Kelly, the one below me, they said, suddenly gone awfully bad and started coughing up blood. She had been taken to the hospital for an operation and would then be sent away to the country; they did not know if she would come back to the house at all.

Two weeks went by. Sorry as I was about Isabel, I could not help thinking how peaceful it was without the harmonica music. Then, one evening, another sound came up through the radiator, a sound unlike anything I had ever heard in the house. I thought at first there must be something wrong with the pipes, and then I realized it was someone playing a flute. Schoenberg, perhaps, I thought, but who on earth could be playing Schoenberg downstairs? Then suddenly the atonal music stopped and my radiator rang with a melody so fresh, gay and wild that I put down my book and sat breathless until it was over.

I heard the flute again the next two evenings, but the soaring melody was not repeated. The flute slurred and sputtered and wailed, producing sounds like the mating songs of cats, and other sounds that were more bizarre still. I began to wonder if this was Schoenberg or any composer, and if in fact the instrument that produced such odd notes was a flute, or any instrument I knew.

On the fourth evening, I decided that I must find out who was

playing. I could say—which was quite true—that the music was disturbing me. I went down the stairs and knocked hesitantly on the door that had been Isabel's.

"Come in, the door's not locked," said a young man's voice.

I opened the door, and was greeted by another blast of unharmonious sound. Then the flutist, who was seated on the bed, took the flute out of his mouth, wiped it reflectively on his trouser leg, and looked at me.

And I looked at him. I remember thinking that he had fine hands, that he was very thin, and that he looked sleepy and not well. As if to confirm this he coughed. A dry, elegant little cough. Then he pointed with his flute to a chair near the bed, and said, "I can't get up at the moment. But please come in and sit down."

"Are you ill?" I asked politely, having seen that he was fully dressed and the bed was made.

"No, I'm not ill. It's just weakness."

"You can't be very weak if you play your flute like that."

"Not physical weakness. Moral." He put the flute to his mouth and played the delicious melody I had heard before. Without thinking, I closed the door and went over to the chair.

"Is it very rude of me not to get up?"

"Yes, if there's nothing wrong with you. And to have made so much noise the last few nights. I was trying to concentrate on—"

"No. You were not trying to concentrate on anything. You have been perishing to come down here and find out who was playing Schoenberg."

"I was—I was not—I did wonder—"

"Well anyway, it is not Schoenberg. These are my own compositions."

"I'm afraid they're just noise to me," I said, recovering myself and determined to be rude back.

"Do you understand the twelve-tone system?"

"No. I'm afraid I know very little about atonal music."

"It doesn't matter. My compositions have nothing to do with the twelve-tone system," he said in a tone of great satisfaction.

"What have they to do with?"

"They are based on a system worked out from the pattern of lunar phases, from wave patterns—ocean waves, not sound—and other organic movements and structures. They are also, to some extent, derived from certain obscure Eastern tonal systems. And then again, they are not. For art, which little scrubbed schoolgirls think of as a reaching toward the light, is really—" he lowered his voice—"a grotesque fumbling, a furtive groping in dark corners."

"Well, your music does sound like that."

He laughed. "We could have a

drink," he said. "Somewhere in that cupboard—" he pointed vaguely with the flute—"is a bottle of cheap whiskey. Would you mind getting it? The glasses are there too."

When I came back from the cupboard, he was chewing thoughtfully on the flute. I stood holding the bottle and glasses, wondering where I should put them down. At the last possible moment, he reached out his hands.

"Do people usually do things for you?" I asked.

"Yes," he said innocently. "In fact, rather too much. It's one of the reasons I have come to this terrible room. No one knows where I am now; no one but you, of course."

"That means, I suppose, you are here to escape your devoted admirers and devote yourself to your composing."

He ignored the edge in this. "Not really to compose," he said musingly. "I am not at all sure about composing. Like all art, music is only a meaningless order which one tries to pretend has some relevance to the chaos of the external world."

"But you said just now that art was groping and fumbling."

"That is what it should be. We have had enough feeble microcosms, fuddled abstractions. Art must get back to being representational. And there is nothing to represent except disorder."

"But music isn't representational anyhow. And all of that is just Dada, or its latest imitations—"

"Nonsense. Dada was only a false disorder, as are its modern counterparts. It is the true disorder that one must capture. Think of an unwashed man in baggy pajamas, groggy from drink or drugs, crawling about under the bed on his stomach looking for a shoe that is not there, under the illusion that it is morning when it is really the middle of the night, and that he must get up to go to an office from which he has been dismissed long ago. There is a creature subject to the divine frenzy. That is the essence of true art."

"And that is what you want to put into your music?"

"Not put. It should simply be there, as the unwashed man under the bed is there. Listen."

He took the flute and began to play, blowing out and drawing in his breath on each note, so the effect was rather like the braying of a desperate donkey. After a minute, I had to put my hands over my ears, at which he stopped playing and smiled at me. There was something disturbing about his smile, and about his eyes, unnaturally bright under their sleepy lids. I wondered with an unexpected rush of concern if it was really only what he called moral weakness that kept him from getting up.

"You are looking at me," he said at once, "with that horrible femi-

nine look, the gimlet eye of the latent nurse. Most women are like that, full of depraved maternalism. Every bed to them is a potential sickbed; they come to be debauched with the air of ministering angels approaching a patient. Lurking inside the nymphomaniac is a creature in a starched cap, smelling of antiseptic, with a thermometer and an enema tube. You must promise never to look at me like that again."

"I wasn't looking at you like that," I said, furious. "I hate sickness. I wouldn't nurse you if you were dying. And all that about nurses and nymphomaniacs I think I've read somewhere—"

"Stop making aggressive protestations, and have your drink."

"It's you who's aggressive. In fact you're damned rude. And as for the drinks, you haven't touched yours."

He picked up his glass, made a wry face at it, and put it down again. "This was hardly my choice," he said.

"You don't mean it's Isabel's?"

"I don't know. Who is Isabel?"

"Isabel Kelly, who used to live here, and was sent away with t.b. I'm surprised they haven't taken all her things out. But we can't drink the whiskey if it's hers."

"I wasn't going to. I only wanted to offer it to you. To be hospitable."

"Do you always behave like this?" I said, distractedly taking a sip from my glass.

"Yes. And I doubt you object. If you did, you wouldn't still be here, drinking Isabel's awful whiskey."

"Then it is Isabel's. And I won't go on sitting here drinking her whiskey, especially since you assume it means I don't object to your behaviour, which I do."

"All right then. Would you like an apology? I am sorry to have offended you. I intend to have no other visitors, and I hope you will come again."

"Thank you. But I'm going."

"But you will come again. And now I have said that, you will be still more offended, and think out of pride that you must not. But why should we go through these silly prevarications? Why can't you simply come down to see me when it is obvious that you want to, and I want you to come?"

Three days went by before I knocked again on the door downstairs. This time my excuse was not sound but silence, and when the same voice said, "Come in," I found it difficult to hide my relief.

"I was wondering," I said defensively from the doorway, "I know you despise the latent nurse and all that, but I did wonder, since I hadn't heard any music, whether your moral weakness, or whatever it is, is worse."

"No, I'm perfectly well. The reason you haven't heard any music is that I have given the music up."

"Why?" I asked, wondering if I could, or should express regret.

"As I told you, I was never quite sure about music. Music, even my sort, is far too orderly. It allows no scope for those random, subterranean movements of mind to which I should like to give expression. Besides, music is regressive. It appeals, through its rhythm, to primitive motor mechanisms."

"But if you want subterranean movements—"

"Yes, but of the mind, not the body. The mind must be free to contemplate chaos. No, I have given up music. Instead, I am writing a play. Would you like to see it?"

"Yes," I said. He reached under the cushion behind his back and held out a sheaf of papers. I took them, and saw with a shock that the play was written in a peculiar foreign alphabet.

"I'm afraid," I said stiffly, "that I can't read Sanskrit, or whatever this is."

He sighed. "It's not Sanskrit. Look at it again."

I looked. The minute, beautiful squiggles danced before my eyes.

"It is no known alphabet," he said wearily, and without smiling. "The play is in abstract calligraphy."

"I think you will have a little difficulty getting it performed."

"It is not written to be acted. It is written to be read."

"Do you yourself know what it says then?"

"I know what it might say. To read my play, one must try to imagine the unimaginable. One must put out of one's mind all the normal subjects of the theatre, both the tragic theatre of the past, which concerned itself with the downfall of the great, and the pathetic theatre of the present, which concerns itself with the downfall of the little. Mine is the theatre of the three disunities, in which everything is possible but nothing happens, and time, place and action are irrevocably divorced."

"Look, are you really serious about this?"

"Of course I am." Then suddenly he began to cough, and bent over, holding one of the sheets of paper to his mouth. When he had finished coughing, he crumpled it up and threw it under the bed.

"But that's part of your play!"

"It doesn't matter. Once written, it exists. And were I to attach value to the pieces of paper which are only its most trivial form of existence, I could not have conceived of such a play."

I could think of nothing to say to this. He began to cough again, and so disposed of another page of the play. At last, noticing that the glasses we had used three days ago were still standing beside the bed, I picked them up and went to the sink to wash them.

There was a silence. Then I said, bent over the sink, "But if

you really are serious, you must want an audience, even if only the littlest of little cliques. I can't believe anyone wants to express something without having it reach anyone else."

"And if I were to write for an audience," said a voice almost in my ear, "Who would the audience be?" Startled, I turned around, dropping one of the glasses into the sink. He had crossed the room without a sound and was standing behind me. He looked at the broken glass and smiled.

"I'm sorry I frightened you. You see, you would rather have me reclining on the bed, enabling you to play ministering angel. I disturb people when I'm up and about."

He took the pieces of glass deftly out of the sink, and dropped them into the garbage pail underneath. He was quite right, it was disturbing. I realized how tall he was, and his quick controlled way of moving did not fit at all with his mannered speech, or the perpetual sleepiness of his face.

"An audience," he went on, "wants only a reflection of itself, and persists in regarding this reflection as flattering. Even satire is a form of praise. The satirized come flocking to laugh at themselves, and leave more complacent than before, feeling they have added humour and tolerance to their other virtues. You forget that an audience is made of people."

"Then why do you do these things? Write, I mean. Or compose."

"It passes the time. And has other uses." He smiled in a way which made me slightly uncomfortable. Then he had another long spell of coughing. At the end of it he walked over to the bed and lay down. I went timidly up to look at him, wondering if I dared show my concern. Perhaps it was really his cough, I thought, that had made him give up the music. In fact, with such a cough it was uncanny he had been able to play at all. He lay quite still, with his eyes closed; I saw that his forehead was damp.

"Look," I said at last, "do you ever do anything about that cough?"

"It's amazing how authoritative you sound the moment I am flat on my back."

"I know you don't want to talk about it, but it is an awful cough. Have you ever been to a doctor about it?"

He opened his eyes, smiled at me, and sat up. "If you really dislike the cough, I will change it for you." He leaned forward and produced behind his hand the terrible deep wheezing sound that sometimes comes out of ragged old men on street corners.

"And now, here is another one, more delicate but quite effective, very good for the moment's hush just before the cadenza. It sounds merely querulous when muted, like

the bark of a rheumatic Papillon. But to our friends the doctors, it indicates, so they think, the last stages of—"

"Please. I won't ask again about your cough."

"Good. I was afraid your nursing instinct was getting the better of you. And now I think I will let you talk about yourself." He coughed once more and lay back on the bed. "We could start with your name."

"Heavens, how strange. We've never asked each other that. I can't understand why."

"Well, what is your name?"

"Hilda. Hilda Wendel. It's an awful name."

"No more than most. Mine is Cyprian—" he hesitated for a second. "Cyprian Meyerbeer."

"It isn't really!"

"Why not? I'm sure you don't doubt other people's names. Why must you doubt mine?"

"I just don't believe anyone nowadays would really be named Cyprian. Especially by parents called Meyerbeer. And it's the sort of name you would make up for yourself. It has that quality of incongruity you seem to find so valuable."

"Quite true. But is it not possible that my love of incongruity comes from the very fact of having been baptized Cyprian Meyerbeer? However, we've had enough of this. I want to hear about Hilda Wendel."

"What? The story of my life?"

"Everything." He settled himself more comfortably and closed his eyes.

"It's all very ordinary, really. I come from a small town, not far away. I've been here a year now, and I have a dull job in a publishing house, in the sales department. I try to write poetry, but it doesn't seem to get anywhere. But maybe one day it will. Unlike you, I do still believe in communication . . ." I looked over at the bed and saw that Cyprian was sound asleep.

I got up at once and went out, banging the door, hoping desperately that Cyprian would wake up and come after me to apologize. But he did not.

Four miserable days went by, during which I began to think how hypersensitive I had been. After all, he might have fallen asleep exhausted by his illness; the cough was probably genuine, and all the business about changing it at will so much bravado. But I could not bring myself to knock on his door again, although my eagerness to see him was whetted by the sound of a typewriter below, which clicked rapidly at all hours. Surely the typewriter could not be used for plays in abstract calligraphy?

The fourth evening, I found a note on my door. "Dear H.," it said, in the alphabet I could read, "I'm sorry if you're offended again. Please forgive me and come down."

We spent another evening much

like the last one. During the next few weeks, we spent many such evenings. I asked him once to come up to my room instead; he said rather gruffly, "I never go out." I did not ask again, but I did suggest that I might bring some food and cook a meal for us. This too Cyprian refused. He would say that he never ate anyhow, or that he could not bear anyone's cooking except his own. We did not even have coffee together. But whenever the smell of frying meat or onions came through from another room, Cyprian would go to stand near his door and sniff eagerly. I found this very odd, but I was learning not to remark on oddities.

After we had talked a few hours, Cyprian's cough would get worse, or he would look especially sleepy; or I would find his theories too wild, his arrogance too oppressive, and would go. But offended or not, I would be back again an evening or two later. "Why can't you simply come down and see me?" he had said. And baffled, infuriated, even frightened by him as I was, the thought of spending a few evenings without him was more painful than any loneliness I had known before.

I never saw him during the day. "I must have my day to myself," he said. What he actually did during the day, apart from odd bouts of typing, I never discovered. In fact, I still knew nothing about him at all. My few questions were rebuffed, at first jocularly, then with a certain sharpness.

"Whatever I told you, you would think was lying, as you think I lie about my name. So I would have to spend boundless amounts of energy inventing for you a Cyprian Meyerbeer you could believe, when the real one is here, all the time, in this room. If you can't accept me as I appear, if you must have a past or future Cyprian, you will have to forego the company of this one."

After this warning I asked no more questions, though I was dying to know, at the very least, for what he was using his old rattling typewriter. My curiosity about this was more than idle. I still thought his ideas chaotic and destructive, even mad. But perversely, the more he lectured me on the futility of things, the emptiness of art, form and order, the metaphysical beauty of the unwashed man under the bed, the more I felt that in Cyprian himself the disorder was only apparent, the superficiality only superficial. I had become convinced that there lurked in Cyprian a little flame of pure genius, like the perfect melody among the atonalities, a seed that wanted only tactful encouragement, intelligent devotion, to grow and bring forth its strange marvellous fruit.

So I waited anxiously to see his new manuscript, and found myself more and more under his influence. I would go up to bed with my head reeling, doubting every-

thing I had ever valued, but with burning certainty that in Cyprian's frenzied mind some extraordinary form or concept was struggling to be born. I no longer cared about anything else. And when I saw in the mirror my haggard face and shadowed eyes, more proper to nights of debauchery than a few hours of conversation, I wondered if my hope of regenerating Cyprian would not end with his poisoning and exhausting me.

The strange thing was, at the thought of our evenings becoming what my constancy and wasted appearance implied, my imagination simply reared back and stopped dead. Cyprian, for his part, made no move to initiate a physical relationship; perhaps his illness made it impossible. His occasional small endearments to me seemed the more spontaneous for sounding so careless. But he had never even shaken my hand.

But anyhow, I would tell myself firmly, my main concern was not with the physical Cyprian. And so I persevered. I listened; I asked no questions; I laughed when I was horrified. I tried encouragement, carefully disguised. "Think how it would upset people to read what you're saying!"

Then, one evening, my knock was not answered, although Cyprian's door had been left slightly ajar. Puzzled, I pushed it open and walked in. He was not there, nor was the typewriter, but a manuscript lay on the bed. I closed the door and, unable to resist, went and picked up the manuscript. It was headed *"The Breed Apart,* by Cyprian Meyerbeer."

"If there is such a thing as savage urbanity—or urbane savagery —then this is the way to describe Mr. Meyerbeer's new novel. If indeed it can be described at all. For this is not only another chronicle of decadence in the 20th-century gothic vein. Its strange somber characters, moving through an endless tapestried twilight, under obscene frescoes they emulate in debauches detailed with an acrid clinical frankness rare even today, are more than they seem. At the end of 900 pages there is an impression of suppressed violence, of moribund grandeur, not likely to be forgotten.

"Gogo Loewenzahn, the antihero, is the last scion of a brief unsavoury dynasty of fascist magnates entrenched somewhere in South America. Gogo is a hunchback and the most passionate of philatelists; his 'grotesque little figure and ardent bespectacled rabbit face' are known to stamp shops and beloved by auctioneers all over the world. He lives in an enormous cluttered house with his younger sister, 'a long plain woman secretly in love with him,' whose only joy is occasional fornication with her favourite Alsatian dog, also named Gogo.

"In a few pungent pages we are

introduced to this strange pair and the bizarre collection of sycophants, stamp-finders and suitors who camp in obscure corners of the house, 'with the tacit consent of Mathilda the sister, some of them unknown to Gogo the hunchback but all of them known, by scent and sound, to Gogo the Alsatian, who hated them'.

"The rest of the book is devoted to a catalogue of Gogo's stamp collection, with an occasional aside describing the goings-on in a nearby room or 'a pathetic rumble from the ulcerated stomach of Gogo' (the hunchback) who sits poring over his stamps. At the end, just before Gogo meets his death at the teeth of his namesake, we are told of the miraculous epithalamic frescoes on the ceiling of his study, under which, unseeing, he has lived and is to die. For what destroys Gogo is his rejection of the lank-haired dank-skinned Mathilda his sister, which is his rejection of Life."

So Cyprian had written a book. And the reviewer seemed impressed. But what reviewer? And why had Cyprian typed a copy of the review?

"At first glance, it seems strange that almost 800 pages should be devoted to the stamp catalogue. But as the book progresses, we see that the catalogue and the 'asides' form a dazzling disturbing whole, that the pattern of the asides within the catalogue is deliberate and meaningful, so the reader is alternately carried forward and jolted back in a compelling rhythm, a verbal pattern of great beauty . . ."

In the midst of this eulogy of the stamp catalogue, I myself was jolted by a suspicion I should have had at once if my eagerness to see Cyprian's genius fulfilled had not carried me away. I leafed quickly on. Another review, this time of a book called *Emmerdé.*

"The entire action of this remarkable little novel takes place in twenty minutes in the middle of the night, in the miserable basement flat of an obscure tenement. Zed, surely the last word in anti-heroes, awakens and begins to search for his shoes, thinking it is morning, and we are given a minute account of all his sensations and thoughts while on his stomach under the bed . . .

"Mr. Meyerbeer, whose previous book, *The Sodomite,* told with daring and unexpected lyricism of the passion of a man for his mare, here shows he can deal with far more than the vagaries of sensual experience. Mr. Meyerbeer has been accused of writing pornography thinly disguised as literature; it would have been more just to accuse him of writing literature thinly disguised as pornography. This book should be adequate proof that he is a young writer of great scope and sincerity. But *Emmerdé,* like *The Sodomite,* is not a book for the squeamish . . ."

"I see you have found my reviews," said Cyprian behind me. I turned around; he stood with his air of being half-awake and smiled down at me. Not knowing what to say, I bent to put the manuscript back, and saw there were still a few pages on the bed. The top one was headed *"The Still Untempered Heart,* by Hilda Wendel." I picked it up and read aloud, my voice screechy with anger:

"Miss Wendel's, to be sure, is a minor talent. But her work has that keenness of perception, that sharply faceted luminosity as of finely cut crystal, which makes such minor poets a relief and a joy. They are poems of feeling rather than experience; like the young girl in *Birthdays,* one of her best poems, Miss Wendel moves falteringly from the yearnings and fears of secluded adolescence toward the coarser world outside, and leaves us with the most delicate of records, a gossamer trail marking a spiritual journey . . ."

I tore the page in half. "You shouldn't have," Cyprian said, smiling. "That was rather a nice one. And just what I thought you would like."

"It was one of the most cruel things you could have done to me. Have you really nothing better to do with your time? Reviews of books by yourself and myself which have never been written—just something to make fun of me and upset me?"

"Like all the injured, you see yourself as the center of things. I had my own reasons for writing those reviews. But I did do them partly for you. Don't think, Hilda, that I haven't noticed what you've been up to."

"What do you mean?"

"You have been swaying on the brink of a dangerous mission, Hilda. You have taken it into your head to reclaim me. You suspect I might be—don't deny it—what sensitive young women hope to find in shoddy furnished rooms, the undiscovered genius. And if I were, the end of it all, of years of humble self-sacrifice you can't wait to begin, would be a few harebrained reviews. So I've written them for you."

I sat down on the bed and began to cry. Cyprian sat down beside me, and watched.

"But you can't," I spluttered between sobs, "you can't go on doing nothing. I don't believe you do nothing. I don't believe you don't want to do anything. I don't believe you, Cyprian."

"Would you believe me more if I never told you the truth? Give me your hand."

Without thinking, I did, and he slid his fingers through mine. I pulled back at once, but Cyprian did not let go. His hand was as cold as ice, so cold I had thought, at the first touch, that something was burning me. I sat tearless now and rigid, not daring to look at

him, filled with an unreasoning fear. I wanted to get up and run out. But I could not. I was as afraid of getting up as I was of staying. After a few moments his other hand began to stroke, very lightly, the inside of my wrist. I still sat helpless and paralyzed, feeling as if my blood, pulsing under his fingers, was mixing with ice water. For his hands grew no warmer at all.

"Cyprian," I said at last, getting back my powers of speech and determined to break this dubious enchantment, "You—I—you're so *cold*, Cyprian."

"It passes," said Cyprian, very softly. But after another few moments he released my hand. And in spite of my fear I was perversely, immediately sorry.

"You see," said Cyprian, "you don't know what you want. And you're afraid. As I expect you to be."

I got up from the bed. "Afraid of what?" I said, furious again. "Afraid of you? I'm not at all afraid of you. And if you're not ill, as you keep insisting, why are your hands so cold?"

Cyprian smiled up at me, quite unperturbed. "Now you would like me to discuss the intricacies of my circulatory system. Which I won't. The cold, I told you, passes. But this will do for a beginning. Come back tomorrow, when you're not so upset." He swung his legs up onto the bed, scattering the reviews, turned over on his stomach, and began to cough loudly into his pillow.

"Oh, to hell with you," I said, and rushed out.

The next day, and the next, and the next, I did not go back down. At the end of three days, I was sick with misery. Tomorrow, I thought, I will go down, but not today. I must have that much pride.

That night, I dreamt Cyprian was playing again. The music began with a pure clear melody, but after a few notes turned atonal with a vengeance, and trailed off in a high-pitched, nerve-shattering scream. Not even Cyprian could get such sounds out of his flute. It was a real scream that woke me. I turned on the light and ran to the door.

MOLLY O'LEARY

I'm not the sort who wouldn't move in where someone had just died. That poor Isabel. Of course she didn't die in there, she died in the hospital. It happened a week before I took the room. I wouldn't really have thought about it, as I say I'm not the sort, but I noticed right away how close it was and sort of musty and those great heavy curtains that hadn't been cleaned in years, moving in that funny way when the wind blew.

It started the very first night. I went to bed about ten after getting the place tidied up. I put on my

new woolly nightgown brushed nylon it is really and I had all the blankets on me and the hot water bottle for my feet but I was still cold and couldn't sleep for ages and when I did I woke up again with this awful feeling I was choking. I turned the light on and looked all over the room and under the bed and there wasn't anything but I couldn't get back to sleep and I kept the light on until morning.

The next day some of the girls helped me move the furniture around so it would be more comfy and when they went I had a cup of tea and I thought how silly I was because the room looked quite nice now. And I went to bed quite happy thinking it was all just a bad dream. But now comes the part you will never believe it must have been around midnight I woke up again and there was a Thing sitting on my chest it was all damp and clammy I could feel its feet through my woolly nightgown horrible little feet like a frog's they were it was just sitting there heavy as a rock on my chest a sort of toad thing how did I know I could see it well enough besides you couldn't mistake the feel of that thing if you've ever seen those awful squishy toads only big as a dog ouagh so horrible it makes me crawl all over just to talk about it and two yellow eyes looking two awful eyes I was frozen with terror but thank heaven I've got a good pair of lungs not like that poor Isabel and at last I got my voice and no I shrieked no and I screamed and screamed and that awful thing plopped off the bed then I couldn't hear it any more I just lay there screaming.

Then they came running from all over the house and people were saying help murder and at last I got the light on and got to the door and there was Mary and the others I just fell into their arms all hysterical they had to get me a sedative they couldn't quiet me down. And then there was that young girl upstairs came down and got all hysterical too said she couldn't understand why I was in that room because a Mr. Meyer was supposed to be in there well of course I got a bit offish at that having just had such a horrible experience and now her thinking I had a Mr. Meyer with me well there never was any Mr. Meyer the landlord said so too told her she was crazy there never was any Mr. Meyer in that room. Then she said we must have heard him typing and playing the flute and Mary and Rose and all the others said no they never heard anybody so then I knew the room was haunted so I said quietly to Rose there's only one man can handle this that Father Gavin who does exorcisms if we don't get Father Gavin I'll never sleep in that room again. So the next day off we went to get Father Gavin and he came with his book and started reciting all in Latin it was

and we watched and waited and Father Gavin said there would be a smell of sulphur when the demon appeared but we couldn't smell anything only Father Gavin's incense and Father Gavin went on reciting for a while and then he said he thought it was already gone and then he said maybe we imagined it after all but then that girl came down again with her hair all wild and started screaming at us get out of Cyprian's room or something like that all hysterical she was and Father Gavin rang his bell at her and you wouldn't ever believe it she fainted dead away at his feet.

HILDA WENDEL

When I awoke it was in the room next door, and there were people all around me fussing and clucking, which was the last thing I wanted. I wanted to be left alone, and most of all I wanted Cyprian. "Cyprian," I said, and began to cry.

They all hovered around the bed, one of them kneeling, and Miss O'Leary sighing heavily. I felt like the corpse at a wake.

"Tell us about him, dear. Might be good for you to talk about it."

"Father Gavin said it's not the first time he's been called in like this. They can start off like a young man, those devils, ever so handsome, and then they go all horrible."

"It was a toad it was sat on me. A great cold thing with sticky feet. Oh, I can feel it now. Cold as ice it was," Miss O'Leary said.

"For God's sake," I said, "What is all this about?"

"You see," explained Miss O'Leary gravely, "You and me, we've both been in the hands of an unholy creature that was haunting that room. Possessed by an evil spirit. But we'll be all right now, Father Gavin said. He knew when you fainted. He's driven it away."

Dear God, I thought, they really believe all this. Then they got up to make tea. I was gathering my forces to escape when a girl I had not noticed before bent over me.

"Would you ever tell me," she whispered shyly, "did he . . . Terrible, it must be. So cold, they say, and as big as a bull's."

This was more than I could stand. "Get away from me," I said.

"Now Mona, you've been on at her. Never you mind Mona, dear. Nice cup of tea for you."

"I don't want any tea. You're all crazy. The young man who was here—and I swear he was—had nothing to do with your delusions about toads. He used to show his plays to me. He was not some sort of sex fiend. He had t.b. or something. He never even touched me." I began to cry again; the absurdity of having been visited by—or visited—what they thought an incubus, and not even to have slept with him!

One of them began, quite kindly, "Here now, we were only trying to help you," but I managed to get up, and dizzy as I was, escaped upstairs.

For several frantic days, I made the rounds of the neighbourhood shops, questioned the landlord, and cross-examined, when I could face them again, my bewildered neighbours. I was determined to prove there had been a real person in the room. But my search was fruitless. The landlord was quite certain the room had not been occupied until Miss O'Leary took it, and did not see how anyone, even with an illicit key, could have camped in it for six weeks without his knowing. He said he had been into the room once or twice during that time and found it just as Isabel Kelly had left it. The Irish girls were adamant about never having heard the typewriter or the flute; one had seen me coming out of the room once and wondered about it; another had heard footsteps, but these could have been mine. As for Miss O'Leary's toad, it had gone as mysteriously as Cyprian, whether because of the exorcism or because, as the landlord said, there were better beds to visit than Miss OLeary's.

As time went by and I was unable to turn up a single trace of Cyprian, I began to consider the ignominious possibility that Miss O'Leary and I had both been subject to a spinsterish delusion. But could one visit a delusion night after night, drink whiskey it poured, read things it had written? Perhaps Miss O'Leary's fantastic superstitions were true, and we had been haunted after all, by the same predatory ghost. What exactly he had wanted, I did not know. But now that Cyprian had disappeared into thin air, I longed no more for his unfulfilled talents but for the body that had seemed insubstantial enough before and which now I was not certain existed at all. I discovered that my imagination had been inflamed by his one icy touch and by Mona's whispering, and now ran on unbridled. Had he appeared as Miss O'Leary's toad, or colder than ice and trailing cerements, whatever he was, delusion or demon, I wanted him. And if an incubus could "start off like a young man and go all horrible," might not the reverse be true—might he not, like the frog prince, turn back to a young man in the morning?

So I waited, night after night, torn between terror and desire. But nothing appeared. No notes on the door, no distant Arcadian melody. No ghosts, no toad. Nothing. And Miss O'Leary, delivered of her evil, snored peacefully downstairs; I could hear her through the radiator.

When I had investigated everything I could, I decided to leave pending the question of the real

Cyprian and pursue the unreal one. First I tried to find out if anyone like Cyprian had ever lived in the room, and possibly died there. This too led nowhere. Then I contacted psychical research societies and mediums. Some of the people I met were obvious fakes, some silly; some were intelligent, friendly and helpful. But none were able to produce either the spirit of Cyprian or a satisfactory theory to explain his appearance and disappearance.

Then, as a last resort, I began to pick my way through the dusty books on the Demonology shelf in my library. They were mostly accounts of possession, one very like the next. I waded impatiently through pages and pages describing the torments of young women who had convulsions, swallowed pins, screamed curses and obscenities, wrestled with unseen forces, denied God and their parents and were eventually exorcised—usually by the clerical author of the account.

And then I found a little red book entitled *"Demoniality,* or Incubi and Succubi, a Treatise, by the Reverend Father Sinistrari of Ameno (17th century), published from the original Latin manuscript discovered in London in 1872, now first translated into English with the Latin text."

Father Sinistrari attempted to prove the existence of "rational creatures having spirit and body distinct from man, but actually of a higher order," i.e., the incubi and succubi. What followed was a very strange doctrine indeed:

"As for intercourse with an Incubus, wherein is to be found no element, not even the least, of an offence against Religion, it is hard to discover a reason why it should be more grievous than Bestiality and Sodomy . . . man degrades the dignity of his kind by mixing with a beast, of a kind much inferior to his own. But with an Incubus, it is quite the reverse . . . man does not degrade, but rather dignifies his nature; and taking that into consideration, Demoniality cannot be more grievous than Bestiality."

However, Father Sinistrari concluded, with a neat theological twist, "men and women, by mixing with Incubi, whom they do not know to be animals but believe to be devils, sin through intention, ex conscientia erronea, and their sin is intentionally the same . . . in consequence, the grievousness of their crime is exactly the same."

This reasoning struck me as very peculiar. However, I read Sinistrari's description of his incubi more carefully. They were "subtile and slender" and more learned than men; they were born and died, and were divided into males and females, even as men. "Their food, however, instead of being gross and indelicate like that required by the human body, must be delicate and vapoury, emanat-

ing through spirituous effluvia from whatever in the physical world abounds with highly volatile corpuscles, such as the flavour of meat, especial of roasts . . ." I remembered suddenly how Cyprian, who never ate anything, had stood by the door sniffing eagerly when anyone was cooking nearby.

Father Sinistrari thought it quite possible that the incubi behaved as humans do, "Cultivating the arts and sciences, exercising functions, maintaining armies . . ." Their sexual tastes, it seemed, sometimes ran to still other beings than human. "It happens not merely with women but also with mares; if they readily comply with his desire, he pets them, and plaits their mane in elaborate and inextricable tresses . . ." The thought of an incubus plaiting his beloved's mane in elaborate tresses made me giggle. Then I remembered Cyprian's unwritten book about "the passion of a man for his mare," and the dog of Mathilda Loewenzahn.

Absurd as Father Sinistrari's theories were, they fitted Cyprian better than any I had come across. The tubercular artist appearance he had chosen for me might be like his real self; even the cough might have been genuine, produced by a foreign atmosphere unhealthy for him, or the germs of poor Isabel Kelly. And the toad appearance might have been a joke to frighten Miss O'Leary out of his room. A joke which had rebounded; I wondered sadly if the exorcism had worked after all.

In other respects, the Sinistrari theories were most unpleasant. The thought of being the rival of the nearest horse was a painful one. But if Cyprian would have faced degradation in seducing a human being, it might explain his restraint. Though Sinistrari's incubi, I found on reading further, seemed to have no such scruples. They were impassioned lovers. And their flesh was not cold at all.

But Cyprian had said of the cold, "It passes," and one could hardly expect Sinistrari to be correct in all details. In any event, this strange little book had convinced me Cyprian was more than a private delusion. I wanted badly to discuss it with someone who knew more Latin and more about theology—or demonology—than I.

On my way out, I passed one of the distinguished old scholars I had always admired. He looked up and smiled. On impulse I stopped, smiled back, and said breathlessly, "Please, I don't know what your field is, but I wonder if you could help me. I've come across this very odd little book, and I'd like someone's opinion—"

He took the book and looked at the title. "Are you doing a thesis on this subject, my dear?" he asked, kindly but with amusement.

"No, I'm just interested. But if you don't have time—or if—"

"It won't take any time. I am already acquainted with Father Sinistrari. He was an eminent demonologist, although somewhat heretical. Another of his works was in fact put on the Index of prohibited books until it was posthumously corrected. This particular manuscript, *Demoniality,* did not appear at all in Sinistrari's lifetime; it was apparently discovered much later, by a French publisher who bought it for sixpence in a London bookshop. I myself find this book utterly fantastic, even of its kind. One expects demonologists to have a perverted turn of mind. But a treatise of this sort, only come to light in the 19th century, and which reads like a satire —one wonders if even that good Father could have been guilty of its authorship. Mind you, this is a purely private opinion."

"You mean you think this book might be a forgery—written as anti-clerical propaganda, or something like that."

"I would hardly commit myself so far. I would only say that I find its content, and the circumstances of its publication, peculiar. Of course, there is no accounting for the fantasies of an overworked inquisitor."

This opinion, instead of disappointing me, filled me with joy. It seemed to me suddenly crystal clear that if a book which might apply to Cyprian was possibly fake and certainly fantastic even of its kind, then Cyprian or some form of him was real. My logic, I knew, was as obscure as Cyprian's, but I felt I was right.

"It's like the unwashed man under the bed," I said eagerly. "Everything takes place in the realm of the absurd." Then I turned embarrassedly to the silver-haired man who was still holding Sinistrari. "I'm sorry, I don't really know what I'm saying. But thank you very much. You've been very kind."

"Not at all," he said. Then, slowly, he got up. I saw with a start how tall he was, and that he was not as old as I had first supposed. He smiled down at me in a way that was oddly familiar, then he handed me the book. I wanted to say something else to him, to ask why he too had apparently read much on this esoteric subject; but that looming figure between the bookshelves had become obscurely frightening, and I did not. It was only after he had disappeared, his feet oddly soundless on the metal flooring, that I, perhaps condemned—and this may have been my tormentor's devious gratification—to be always too late, like the man under the bed, for what it was too late to be late for, began to suspect who he was.

INTERVIEW WITH A LEMMING

by James Thurber

THE WEARY SCIENTIST, TRAMPING through the mountains of northern Europe in the winter weather, dropped his knapsack and prepared to sit on a rock.

"Careful, brother," said a voice.

"Sorry," murmured the scientist, noting with some surprise that a lemming which he had been about to sit on had addressed him. "It is a source of considerable astonishment to me," said the scientist, sitting down beside the lemming, "that you are capable of speech."

"You human beings are always astonished," said the lemming, "when any other animal can do anything you can. Yet there are many things animals can do that you cannot, such as stridulate, or chirr, to name just one. To stridulate, or chirr, one of the minor achievements of the cricket, your species is dependent on the intestines of the sheep and the hair of the horse."

"We are a dependent animal," admitted the scientist.

"You are an amazing animal," said the lemming.

"We have always considered you rather amazing, too," said the scientist. "You are perhaps the most mysterious of creatures."

"If we are going to indulge in adjectives beginning with 'm,'" said the lemming, sharply, "let me apply a few to your species—murderous, maladjusted, maleficent, malicious and muffle-headed."

"You find our behavior as difficult to understand as we do yours?"

"You, as you would say, said it," said the lemming. "You kill, you mangle, you torture, you imprison, you starve each other. You cover the nurturing earth with cement, you cut down elm trees to put up institutions for people driven insane by the cutting down of elm trees, you—"

"You could go on all night like that," said the scientist, "listing our sins and our shames."

"I could go on all night and up to four o'clock tomorrow afternoon," said the lemming. "It just happens that I have made a lifelong study of the self-styled higher animal. Except for one thing, I know all there is to know about you, and a singularly dreary, dolorous and distasteful store of information it is, too, to use only adjectives beginning with 'd.'"

"You say you have made a life-

long study of my species—" began the scientist.

"Indeed I have," broke in the lemming. "I know that you are cruel, cunning and carnivorous, sly, sensual and selfish, greedy, gullible and guileful—"

"Pray don't wear yourself out," said the scientist, quietly. "It may interest you to know that I have made a lifelong study of lemmings, just as you have made a lifelong study of people. Like you, I have found but one thing about my subject which I am not able to understand."

"And what is that?" asked the lemming.

"I don't understand," said the scientist, "why you lemmings all rush down to the sea and drown yourselves."

"How curious," said the lemming. "The one thing I don't understand is why you human beings don't."

Science fiction frequently visualizes future societies which are dominated by the loss of individual freedoms. However, one freedom is not often mentioned—the individual's right to die . . .

WHERE IS THY STING

by Emil Petaja

HE GRINNED SOMBRELY DOWN at the dark befogged waters under the tottering Golden Gate bridge. It had not been easy, doing what he'd done, outwitting the S-V Squad. But he had and now, before jumping, he took a cliff-hanging moment to savor this satisfaction.

He thought back to that interview with Jason Korb, one of S-V's top psychologists. . .

"Wendell, this is the third time. The *third* time!" Dr. Korb's creased face, under that shock of snow-white hair, was a calculated study in benevolent reproach. "First the gun. Lord knows where you found that. Then the kitchen knife. Last night, weed-killer." He wagged his head sadly. "You should know by now that we keep close tabs on such things. Every inquiry, every suspicious movement you make, is fed into the master alarm of the Suicide-Vulnerability Complex."

Wendell Kane's shrug expressed irritated chagrin. "A guy can hope, can't he? Machines make mistakes."

"Not ours," Dr. Korb told him pleasantly. "Can't afford to, not in cases like yours. Since the last years of the Third Total War, when the Eastern Powers began using depressive gases and then thalamic radio waves, waves which inhibited all pleasant and joyful emotions and accentuated tormenting and suicidal ones—"

Wendell hiked up his wiry frame onto the pillows so that he could reach a cigarette off the table and Dr. Korb could light it for him. The psychologist droned on until Wendell interrupted. "I know all about it, Doc. How millions killed themselves under the pressure of the suicide waves, how other millions killed themselves out of grief and empathy. We were forced to reciprocate in kind until nine-tenths of the human race went down the drain. I know all that."

The kind-faced doctor sighed and gave a little shiver. "One would almost think that *you* were a victim of the suicide-waves. Only it couldn't happen, not since we finally discovered an immunity formula." He glanced over at the curvaceous nurse in the cute uniform, who was hovering nearby with a little tray on which was a plastic cup with capsules in it and a glass of water. "You haven't taken your medicine again."

"The happy pills? No, thanks."

"They can't change a normal grief syndrome, unfortunately," the doctor sighed. "But they do help." His shaggy eyebrows tilted, he nudged a waggish look toward the girl with the tray. "What do you think of Nurse Ambers. Pretty, eh?"

Wendell followed his glance and nodded. She was. Nurse Ambers certainly had all of her accessories in the right places and in the right proportions. Anybody could see that. And her wave of auburn hair matched the pert animation of her green eyes and the slightly uptilted nose. But Nurse Ambers was all part of the treatment and that put a damper on it.

Dr. Korb rested a fatherly hand on his arm. "You've just got to make yourself understand the situation, Wendell. We need young men like you. We need you desperately. We—we love you."

Wendell knew exactly what the psychologist was doing—he was pointing up Wendell's importance in the rather ragged scheme of things, appealing to his sense of racial responsibility and at the same time trying to make him feel cherished. To most men his position was certainly enviable. He was cock of the walk.

He stared unhappily out of the window. Out there was a serenely beautiful pastoral landscape, therapeutically contrived. All this for him. But the word "love" snapped the name "Karen" into his conscious mind, with wrenching agony. For a moment Karen's lovely face was superimposed over the green and yellow foliage and the blue sky. His eyes lidded and he yanked his look back to the pastel walls of his room in the S-V hospital.

"Don't pull that stuff on me, Doc," he begged.

"But we do love you. We love you and need you."

Wendell's smile became a wince. "Can't you spare just one? Me?"

"A healthy virile buck like you? No, we can't! Not possibly! It's not only here on Earth. Our planetary colonization is moving forward swiftly, since we need livable space to make up for the large blighted areas. We need lots of things; mostly, we need YOU. You and your healthy genes. When we found to our horror that artificial insemination would no longer work, since the active life span of the sperm was cut to almost nil—"

"There are others," Wendell broke in.

"Few! Pitifully few!"

"But if I would rather be dead—"

"Impossible! I quite understand what a trauma Karen's death was; that it put you on the vulnerable list. Oh, we have been watching you carefully since Karen died. We stopped you from committing suicide the first two times without showing our hand. We hoped that the vulnerability would wear off. Then, that weed-killer episode last night." Dr. Korb allowed himself to become momentarily severe. "I am the one who is responsible for you, Wendell. I warn you that I will keep you from killing yourself, and help you to do your patriotic duty, any and every way I can!"

Wendell lit a cigarette from the butt of his last. "Sorry to be difficult."

"Good. From now on we're going to be a good boy, aren't we?" A fatherly pat on the shoulder. "Things will work out."

"I suppose you'll be watching me day and night?"

"Like a hawk. Until the S-V syndrome passes. Which it will. We'll help you. We will engulf you with TLC, won't we, Nurse Ambers?"

The redhead was staring at Wendell. There was something in her eyes. Staring, she suddenly let her tray fall, and ran from the room.

"See there?" Dr. Korb clucked. "That's a small sample of the critical state the world is in."

Wendell stared glumly at the closed door. He said nothing. What was there to say?

"Would you like to leave now?"

"Yes."

"All right, my boy. But you will meet us halfway? You will *try?*"

Wendell's smile was thin and careful. "Sure, Doc. I'll try."

In all, he tried seven times more, before the Bridge. They trapped him all the other times. It got to be a game of cops and killer—with Wendell both killer and victim. Somewhere along the path he realized that the one possible way to outwit the S-V was to get hold of a substitute; someone they could be keeping their electronic eyes on while he was out committing suicide.

He found just the man, in a bar one dark night. He gave him all the money he had; money wouldn't mean anything down there in the icy water under the Bridge.

Leaving his alter ego back in the sumptuous apartment made available to him, he disguised himself as a Neuter and slunk down the foggy streets to his rendezvous with death.

Neuters were the random products of the earlier series of atomic wars, before the suicide-waves took over. Females, in the way of Mother Nature, proved hardier than males; so now there was a vastly disproportionate number of young women: luscious, desirable, fertile. It was the functional males and their fragile-lived sperm cells who were in alarmingly short supply. Eventually the scattering of virile men on the planet was carefully tabbed, kept day-by-day track of, and subsidized. As Dr. Korb had pointed out, they were needed not only to perpetuate the human race but for the colonizing space thrust which the interminable series of local wars had interrupted. Robotics was pushed ahead; for labor, Neuters (plentiful as yet, but dwindling) were pressed into service, but for the most part they were skatty and unreliable. Some were dangerous. It was the oldsters and the more level-headed nonviriles who kept things moving.

Shambling onto the shrouded bridge approach, aslant and in disrepair from atomic pummelings and from the prevelance of aircab and airbus transportation across the Golden Gate, Wendell probed dirtied fingers across the ugly sores he had made-up on his face and neck. He made sure, too, that his scrofulous mess of a wig was on straight over his own hair.

"Hey, you!" A bridge guard loomed out suddenly from behind a jut of bulkhead, snapping on his torch and flashing it in the direction of the crunch of footsteps.

Wendell froze, but he managed to control his urge to panic. As the crisp ring of light cut through the fog and clung in a thoughtful circle on his leperoid face, he made his filthy hands dangle on his ragged pantslegs in imitation of the mutant Neuters of the Marin forests.

The guard, he saw or sensed rather, from the objective evidence of his rough voice and the angle of that swinging torch, was big and burly—if old. Instead of moving back and snivelling, as one of the city's alley-types might have done, he shuffled forward in a kind of hopeful glamour, as if starved for any shred of human physical contact. *Clean* physical contact. The forest mutants were like that.

"Where you headed, mute?" The guard swore and moved back a step.

Wendell stopped and stood there, swaying. He waited a ponderous moment, as if the simple

question required enormous thought, which for a mutant it did. Then he lifted a lolling hand and pointed it across the bridge toward the Marin hills.

"Tamalpais Caves, eh?"

Wendell nodded.

"Okay, git. And don't come back. We don't want you mutes over here. The alley-rats are bad enough. Next time I'll use my blast."

Wendell tittered and scuttled into the fog, along the rising twist of cable. He paused, ears tuned for the faint scrape of the guard's boots on the rubbled asphalt. When he heard the door of the guard-shack slam he broke into a run.

At the center, where the cable swung lowest between the ancient twin pylons, he slipped under; he hung there, arms looped around the wet rusted metal. His eyes puckered up to dig the shrouded Bay, to see San Francisco for a last time, as so many hundreds—then thousands—then tens of thousands—had done before him. He saw nothing but blurred wisps of light, first; then a drying beacon washed across the skyline leaving a momentary wake of cleanness. He glimpsed such things as the sheared-off Mark Hotel on the top of Nob Hill and the crumbling remains of Coit's last erection. Senses sharpened to a fine point by nearness to eternity, he heard the bleating of dipping gulls as if they were an extention of himself; he heard a tugboat's mournful toot like a cosmic wail of grief; and the off-harmonics of the foghorns from the Farallones to Hunter's Point were an unearthly chorale.

The chemical tang of the unseen water below made his nostrils itch.

He grinned.

His hand waved up in a final salute to his preposterous, near-defunct world. To Dr. Korb. To Nurse Ambers. To all the hopeful, hopeless rest.

Then he jumped.

"Karen?"

"Yes, darling. It's me."

Her exquisitely contoured face, that pale fire in her hair, and the way she had of specially smiling when they'd been apart even for a day. It was all there. Floating out of a blue mist froth, like cloud and sea and sky all beat together.

This was death?

Dropping through the rush of wind, his last thought was of Karen, so it was pure logic that she should be the first thing he saw—after. The amazing thing was that there was an *after*. His death-wish had not dared to even hope for such a thing as tangible existence after he had accomplished his stubborn purpose. It was simply that he hadn't been able to face life without her, that was all.

Now, here she was, moving toward him out of that blue mist, walking in the familiar way that

made him sob out loud; then plunging forward into his arms. . .

They didn't even talk for what could have been hours, or days, or eons. They just lay there. The urgency of his intolerable grief had been swept away by that jump. So this was death. Hooray! He accepted the ecstasy as he could not accept the misery of her loss. He didn't want to think about it. He wanted no answers. He had Karen back. That was all he wanted—the sum total of his universe.

"Kiss me," Karen demanded.

He did. The mist swirled around them. There was music; soft, compelling, evocative. After a while he drifted off to sleep. . .

When he awoke his groping hands discovered that he was alone. It was sheer torture, coming back to life this second time. His muscles ached and the way his brain kept floundering and flopping insisted that he had been drugged. Did they give you drugs after you were dead? Was it to force you back to life? Did the crabs down at the bottom of the Bay poke you with hypodermics?

For quite a while his eyes refused to focus, and when he hiked up on one elbow, a wave of nausea sent him spinning back on the pillow. When he moved his hands and his feet it was with irrelevance, there was no coordination. He must rest. *Sleep.*

But, damn it all, he didn't want to sleep any more. He wanted to get up, now. He wanted to find out what this new life was all about. He wanted Karen.

He hiked up again and, in a convulsive shudder of movement, he forced his eyes to range across the room. Yes. It was a room. The dancing mist was gone. The music was gone. He lay on a bed in a large windowless room.

After several futile tries he tottered up on his feet. His mind reeled madly and fought to snag onto cohesive ideas. He stood there by the bed for a long time, fighting for physical and mental equilibrium; then at last he staggered for the door at the far end of the room.

The door seemed to have four or five knobs on it and they wouldn't stay still. Finally he caught hold of one and wrestled the door open.

Now he was moving down a clean, white, empty hall. He steadied himself now and then on the smooth white walls, screwing up his face and trying to make his thoughts take on meaning. *Doors.* There must be more doors leading to more rooms. Behind them he would find answers.

He moved around a corner with aching slowness. It was deathly quiet, except for a roaring wind inside his head.

"There you are," he said, out loud. "You door, you."

It was at the end of this section of hall and, after five minutes'

fumbling, he managed to get it open. He stood there in the doorway, looking. Looking. Weaving from side to side and *staring*. He tried to protest what he was staring at, make it go away. Nothing came out but a forlorn froggy croak.

"Kar—Kar—" he tried to say, pointing into the crowded room.

Then the floor reached up.

"Better now, are we?" Dr. Korb's voice was sirupy soft.

"Go away!" Wendell shoved his face hard into the pillow. His mind wasn't working yet, but his whole being was suffused with an emotion that made every muscle in his long muscular body shiver. Rage. Screaming, blind rage.

"Let him sleep some more," a gentle, familiar voice murmured, and there was a touch of anger in it when Nurse Ambers added, "He's had a fantastic shock. Let him get over it gradually."

"It's your fault," Wendell heard Dr. Korb hiss out, in a pettish carp. "You ought not to have left him alone."

"I couldn't bear to look at him any longer. Knowing what you had planned for him. Besides, the sedative should have kept him out at least five more hours. I can't understand how he ever made it all that distance, poor boy."

"Poor, hell. He's got a vitality and stamina that's incredible. I still think my idea was basically sound. Cost a fortune, all that special surgery. But Kane's worth every penny. He could handle it; getting out of bed with all that dope in him and making it all the way down to the—waiting room."

Wendell's ears registered a protesting feminine sob.

"It's cruel. Inhumanly cruel. The whole plan. Planting the substitute in that bar so that he would pick him, like a magician forcing a card. Allowing him to be tricked by the guard's hypnotic torch, so that everything that happened after that—on the Bridge—was only in his mind. Bringing him here and—"

"My orders were to give him what he wanted. Everything he wanted and exactly. I tried to do that, the best I could!"

"He'd be bound to notice the differences after while."

"Of course. In spite of the special rush training. But by that time he'd be over his suicidal trauma. A lot of men would find it anything but onerous. Living any place he wanted to. Travel. Money. Enough work of whatever kind he wanted to keep him pleasantly occupied. Stimulating pastimes. It was a beautiful plan!"

"Not for Wendell." Nurse Ambers' voice was soft and it had a catch in it.

"How do you know?"

"I just know."

Dr. Korb pushed out a sigh, the sigh of a scientist who has built up a painstaking theory to save the world and gone to enormous lengths to set it in motion, only to have it crumble like a house made out of cards.

"Well, they can't say I didn't try," Dr. Korb sniffed. "I'll leave him to you. You'll break it to him?"

"I'll do my best."

The room was very still after that, and Wendell drifted off for a while. He awoke filled with that nerve-tightening anger again, futile rage at the world and everybody in it. Especially Dr. Korb. But still—threaded through the humiliation and the blasphemy—was a faint aura of something resembling sanity and even hope. He identified it finally with the cool hand on his forehead, when he began to stir and his face began to twitch protest at being made to live again.

He opened his eyes and looked up at Nurse Ambers.

She didn't smile but her green eyes said a lot. When she started to take her hand away he forced it back. There was something about the coolness of it on his forehead, and something in her green eyes, that made him decide that it was only a nightmare—that shambling trek down the hall to that waiting room, that waiting room crowded to overflowing with phoney Karens.

THE TIMES OF OUR LIVES

by Isaac Asimov

A NUMBER OF YEARS AGO, I HAD occasion to call Anthony Boucher, who was once Scholarly Editor of this worthy magazine, and who was (and is) a good friend of mine. I live in Massachusetts and he lives in California, and I know there is a three hour difference in the time.

Noting it was 9 A.M. by my watch, I decided to call him at once and catch him at precisely noon, before he had a chance to go out to lunch. I reached him without trouble. I was my usual ebullient self, but there seemed to be a certain constraint about him which bothered me a bit.

Finally, I said, "Is there anything wrong, Tony?"

And he (the politest man in the world) said, "Not really. I'm just not at my best at 6 A.M."

Alas, alas, in my haste I had added three hours to the time on my watch instead of subtracting them.

But that's not the end of the story—

Not long afterward, I wrote a book on time measurement and I thought it would be funny to include the story on the back flap where the little biographical squib goes. The publisher thought so, too, except that he didn't think it would reflect well for the author of a book like that to own up to such a mistake, so, without consulting me, he reversed matters, and said that someone had called *me* at the wrong time.

How's that for adding insult to injury? Fortunately, they didn't mention Tony's name and I hereby make amends. It was all *my* stupidity.

And despite that thorough advertisement of my incompetence, I shall discuss time-zones anyway.

The fundamental time of day is noon because that can be measured unequivocally. Noon is when the center of the Sun coincides with the line of the meridian. (The meridian is the imaginary north-south line passing through the observer's zenith; see GHOST LINES IN THE SKY, *F & SF*, May 1964.)

As nearly as we can judge by the way things feel, the interval from one noon to the next stays just about the same from noon to noon to noon to noon—

If we manufacture a clock that will turn its hands at an absolutely constant and appropriate speed, we will find that our feelings are just about right. If the clock is adjusted so that it registers 12 when the Sun crosses the meridian, it will register 12 again when the Sun next crosses the meridian, and 12 again when the Sun next crosses the meridian.

Or, at least, it will *almost* register 12 each noon. If we adjust the clock so that it will mark exactly 24 hours to the day, we will find that in the course of the year, the time at which the Sun crosses the meridian will rarely be exactly noon. And adjusting the clock to make it go a little slower or faster will never correct matters. No matter how the clock is regulated, it will never mark off the noons properly, as long as it ticks at a constant rate.

But if the clock's hands turn at a constant rate, and if the Earth rotates at a constant rate, what's the problem? Astronomy is the problem. If the Earth's orbit were an exact circle and if its axis had zero inclination, then noon would come on the dot of 12 each day of the year as measured by a constant clock. But the Earth's orbit is an ellipse, and the Earth's axis is tipped a little more than twenty-three degrees to the plane of the ecliptic, and these factors introduce an irregularity.

Thus, if the Sun crossed the meridian at exactly 12:00:00 on December 20, it would cross it just a trifle after 12:00:00 the next day, and a trifle later still the next day, and so on. By early February, the Sun would be crossing the meridian at 12:16 P.M. Then it would start crossing earlier and earlier. It would be back at 12:00 April 15, be down to 11:54 A.M. on May 15, back to 12:00 on June 20, to 12:06 P.M. on August 1; back to 12:00 on September 1; out to 11:44 A.M. on November 5 and back to 12:00 on December 20.

Obviously you can't have a Sun and a clock that keep slipping past each other back and forth from day to day in a monotonous and complicated dance, even if it does all average out in the course of the year.

We have to choose between three alternatives: 1) We follow the Sun and ignore the clock; 2) we follow the clock and ignore the Sun; 3) we adjust the clock to a variable speed that just matches the antics of the Sun, and follow both.

But consider how convenient it is to tell time to the minute by a clock and how difficult to do the same by the Sun. Consider also how difficult it is to work out the gears that would match a clock to the Sun. It is no wonder, then, that as soon as accurate clocks were invented in the mid-17th Century, the Sun was immediately dismissed.

In place of the real Sun which crosses the meridian in an irregular fashion, astronomers have invented a "mean Sun" which crosses the meridian regularly and on the dot, every 12:00:00 (as marked by an ideally accurate clock) on every day of the year.

Time that is based on the actual passing of the real Sun across the meridian is called "apparent time." Time based on the crossing of the mean Sun is "mean time."

The relationship between mean time and apparent time in the course of the year is expressed by the "Equation of Time." The easiest way of representing the Equation of Time graphically is by means of a lop-sided figure-eight which you will find somewhere in the Pacific Ocean on most sizable globes. It is called an "analemma" and if you study it carefully, you will be able to work out the difference between apparent time and mean time for every day of the year.

Mean time differs with one's longitude. Everyone who is standing on precisely the same north-south line on the Earth's surface has the same meridian overhead, and the mean Sun crosses it for all of them together. If one person stands to the east of another, his meridian (the more easterly) is crossed first by the mean Sun, which is coming from the east. The mean Sun, in its apparent motion from east to west (as the Earth rotates under it from west to east) crosses, in succession, all the infinite number of meridians on the globe in 24 hours.

The east-west circle drawn around the Earth at the Equator, or along any line parallel to the Equator ("parallels of latitude") is marked off in 360 degrees of arc (360°). If it takes 24 hours for the Sun to pass 360°, it takes it 24/360 hours, or 4 minutes, to pass 1°.

Since there are 60 minutes of arc (60′) to each degree and 60 seconds of arc (60″) to each minute, it takes the Sun 4/60 minutes, or 4 seconds, to traverse 1′; and 4/60 seconds or 0.067 second to traverse 1″.*

* *It would be so neat if seconds and minutes were made only 1/15 as long as they are. It would then take the Sun 1 "short-second" to traverse 1″ and 1 "short-minute" to traverse 1′. Sixty such "short-minutes" would then make up a "degree of time" in which the Sun would traverse 1°. Fifteen degrees of time would make an hour and twenty-four hours would make a day. —However, no one in the world would want to go through the madness of the transition to such a new time scale, just so that the Earth's meridians would become a perfect match for Earth's clocks and thrill my sense of neatness.*

Let's see what this means, practically. The city of Boston is at a latitude of about 42°20′ N. At that latitude, one degree of arc along an east-west line is equal to 51.3 miles. One minute of arc is equal to 1505 yards and one second of arc to 25 yards.

My house is just about 9.2 miles due west of the State House in Boston, or about 10.8 minutes of arc. Imagine the mean Sun just crossing the meridian at the State House. It will take it 43.2 seconds to cross the 10.8 minutes of arc between the State House and my house. Therefore, when it is 12:00:00 at the State House, it is only 11:59:16.8 A.M. at my house. And when the mean Sun reaches the meridian of my house so that I am at 12:00:00, then it is 12:00:43.2 P.M. at the State House. These are examples of what I might call "individual mean time."

Indeed, we can go farther. My house is not a mathematical point. Its widest east-west extension is about 20 yards or 0.8 seconds of arc. That means there is a twentieth of a second of difference in time between the place in which I sleep and the place in which I type. My typewriter is west of my bed, so when it is 12:00:00.00 at my typewriter it is 12:00:00.05 P.M. at my bed.

It is, of course, ridiculous to bother with "individual mean time." If there were a great huge "town clock" on top of the dome of the State House which I could see from my window, I would cheerfully set my watch by it and be hanged with the 43 seconds one way or the other. Being a little off from the mean Sun would be as nothing compared to the convenience of having a clock that agreed exactly with all the other clocks in the Metropolitan Boston area.

In fact, as late as the mid-nineteenth century, it was customary to take one's time from the town clock or its equivalent. In place of individual mean time, there was "local mean time," the mean time that was held constant over an entire locality. And if a town twenty-five miles west decided to run its own local mean time 2 minutes earlier than the local mean time of your own town, well, that was all right, too.

In 1850, then, that portion of Earth's surface which had accurate clocks as part of its culture was divided up into an incredible patchwork of local mean times.

But by 1850, railroads were beginning to weave their steel networks across various nations and for the first time, sizable quantities of people undertook to make routine overland trips. For rail travel to be efficient and reliable, trains had to arrive and leave "on time." If they did not do so, passengers would be forced to wait for unconscionable lengths of time at the station or, far worse, arrive just as the train was vanishing off into the distance.

The railroad was the first everyday phenomenon in the history of mankind which made "the exact minute" a meaningful rather than a metaphoric phrase. Until then, there was nothing (except perhaps for astronomical observations) that required of the average man any precision in time closer than "when the Sun is just past zenith" or "in the second watch of the night when the Wain verges on yon distant steeple."

So the trains started putting out time-tables to guide prospective passengers and found at once they could not use local mean time. Local mean time varied from point to point along the railroad and any attempt to use Podunk time for Podunk and Squeedunk time for Squeedunk ground down into miseries for all concerned. It was necessary to establish a local mean time that would cover an entire railroad network.

To do that, you would eventually have to establish that local mean time as applying not only to railroads but to everything else. People just won't use one time for themselves and another time for the railroad and walk around with a table of conversions to use whenever they want to catch a train.

Fortunately for themselves, those nations which most quickly built up a rail network in the mid- and late-nineteenth century, had a relatively small east-west extension, and there were but small time differences involved.

In Great Britain, for instance, the time difference between London and Glasgow is 16 minutes. In France, the time difference between Strasbourg and Brest is 45 minutes. In Germany (using 19th Century boundaries), the time difference between Aachen and Konigsberg was just about 1 hour.

In such nations, a single local mean time could be established for the entire rail network and the entire nation, and nobody would be differing from the Sun by more than a few minutes. The discrepancy was a microscopic price to pay for the enormous convenience gained.

(Just the same, I'll bet that when the order came to the town of Niederschagen or Pompomterre or Swanslea-on-the-Wicket to alter the town clock by seven minutes to adjust to the national standard, there were loud outcries by some against "tampering with God's time.")

In exactly two nations in the 19th Century was the solution a difficult one, for there were two nations that combined a rapidly growing rail network with an enormous east-west extension. Those nations were, of course, Canada and the United States. The time difference between Portland, Maine and Portland, Oregon, is about 3.5 hours, while that between Halifax and Vancouver is about 4 hours.

No single time could be conveniently established for all of the United States and Canada, and for a while each railroad system used its own time standards. The result was chaos with a capital K.

Through hindsight, the solution is childishly simple. It was simply to divide a large east-west nation into strips, within each of which there would be a set "standard time", and with a one-hour difference from one strip to its neighbor.

This idea was first advanced and fought for by Sandford Fleming of Canada and Charles F. Dowd of the United States. I mention them chiefly because like so many benefactors of mankind they have been rewarded by total obscurity.

Now let's see how such time-strips work. We can begin with the 0° meridian—the "Prime Meridian" or the "Greenwich Meridian" (be-

Table 1

Meridian	*Time (12-hour)*	*Time (24-hour)*
180°	midnight	24
165° W	1 A.M.	1
150° W	2 A.M.	2
135° W	3 A.M.	3
120° W	4 A.M.	4
105° W	5 A.M.	5
90° W	6 A.M.	6
75° W	7 A.M.	7
60° W	8 A.M.	8
45° W	9 A.M.	9
30° W	10 A.M.	10
15° W	11 A.M.	11
0°	noon	12
15° E	1 P.M.	13
30° E	2 P.M.	14
45° E	3 P.M.	15
60° E	4 P.M.	16
75° E	5 P.M.	17
90° E	6 P.M.	18
105° E	7 P.M.	19
120° E	8 P.M.	20
135° E	9 P.M.	21
150° E	10 P.M.	22
165° E	11 P.M.	23
180°	midnight	24

cause it passes through the Greenwich Observatory in London)—and suppose that it is precisely noon there.

It takes the mean Sun just one hour to traverse 15 degrees from east to west. It will therefore be one hour before it reaches 15° W, and when it is noon at 0°, it is 11 A.M. at 15° W. By the same reasoning it is 10 A.M. at 30° W, 9 A.M. at 45° W and so on.

Going back to the Prime Meridian, we can see that it took the mean Sun just one hour to reach it from a point 15 degrees to the east. By the time it is noon at 0°, it is therefore 1 P.M. at 15° E. and, by similar reasoning, 2 P.M. at 30° E and so on.

We can indeed set up Table 1, matching longitude and time. Furthermore, we can simplify the time-markings by doing away with the ridiculous A.M. and P.M. bit. We can simply count the hours from 1 A.M. to noon as 1 to 12 and then continue onward with 1 P.M. as 13, 2 P.M. as 14 and so on till we reach midnight as 24. This system is used in the armed forces, but I approve of it anyway and wish it would come into general and world-wide use.

Imagine, next, that we divide the surface of the Earth with mathematical exactness into twenty-four strips like the segments of a tangerine, each strip centering about one of the meridians in Table 1. Each strip would represent a "standard time zone" and would stretch from 7.5° east of the central meridian to 7.5° west of it. Thus, the time zone from 7.5° W to 7.5° E would be the one centering on the Prime Meridian.

Four such standard time zones cross the forty-eight contiguous states of the United States. In theory, they are:

1) 127.5° W to 112.5° W, centering about 120° W.
2) 112.5° W to 97.5° W, centering about 105° W.
3) 97.5° W to 82.5° W, centering about 90° W.
4) 82.5° W to 67.5° W, centering about 75° W.

There are given names that are applicable to the geographic situation within the United States: 1) Pacific standard time zone; 2) Mountain standard time zone; 3) Central standard time zone; 4) Eastern standard time zone. It is hopeless ever to try to give up these names, but it must be realized that they are purely local. The same time zone that embraces eastern United States (and is therefore called "Eastern") covers western South America. The "Mountain" zone, which covers the Rocky Mountain area, in other places stretches over trackless ocean.

So let's speak of time zones on a planetary scale by some device that is not local. The labels ought to have planet-wide significance.

We could label each zone by its centrally-placed meridian, and speak of 75° W standard time instead of "Eastern standard time." Or, to simplify it further, we could call it "Zone 75 West". This is not bad, but it is not dramatic enough. Since the whole purpose of these time zones is to standardize the marking of time, why not call each zone by its time.

If we start with the time zone centering about the Prime Meridian at the conventional time of noon, you can call that time zone "Zone 12" (using the armed forces method of marking the hours of the day.)

If you check Table 1, you will see that if the Prime Meridian is at 12, then 75° W is at 7. Since 75° W centers the Eastern standard time zone, we can call it "Zone 7." Similarly, Central standard time is in "Zone 6," Mountain standard time in "Zone 5" and Pacific standard time in "Zone 4."

In theory now, everyone who knows his own longitude, or can find it on a map, ought to know in which time zone he is—but that's counting without the political and economic facts of life.

The boundary between Zone 7 and Zone 6 is the 82.5° W meridian. That goes right through the middle of the states of Ohio and Georgia.

It is inconvenient for a state to have part of itself in one time zone and part in another. To have Cleveland in Zone 7 while Cincinnati is in Zone 6, or Savannah in Zone 7 while Atlanta is in Zone 6 would introduce unnecessary complications in the state government and economy.

Well, what one decides to have a clock face say is entirely a matter of arbitrary decision. Ohio and Georgia both decided to have their clocks agree with the great population centers to the east, and the entire state is, in each case, in Zone 7.

Similarly, the western section of Texas (more than half of the state) is in Zone 5, but the large cities in eastern Texas: Dallas, Fort Worth, Houston and Galveston are in Zone 6. Texas has decided to place itself, entirely in Zone 6. This means that El Paso, Texas, which is actually closer to Zone 4 than to Zone 6, is nevertheless in Zone 6.

This sort of irregularity, introduced to make the time zones suit man-made boundaries and the economic facts of life, is found everywhere in the world. Thus, eastern Brazil, with its large cities of Rio de Janeiro and Sao Paulo is in Zone 9. Uruguay and most of Argentina are, in theory, in Zone 8. However, such are the practical benefits of having a unified time over the entire area, that both Uruguay and Ar-

gentina have declared themselves entirely within Zone 9. Even western Argentina, which is actually within Zone 7 (*my* Zone) is legally in Zone 9.

In the same way, Great Britain is entirely within Zone 12, while Scandinavia and Central Europe are within Zone 13. France and Spain are, properly speaking, in the same Zone as Great Britain, but the land connection with central Europe and the convenience of a rail network without a time jump is such that France and Spain place themselves in Zone 13.

Very few nations in the world allow themselves to have more than one Zone. They subject themselves to the inconvenience of time differences within their own boundaries only when the east-west extension is so great as to make it absolutely unavoidable.

The record number of time zones within a single political unit are the eleven making up the Soviet Union. Its western boundary is in Zone 14, its eastern boundary in Zone 24. When it is 2 P.M. in Moscow, it is midnight at the Bering Strait.

There are four Zones in the 48-state stretch of the United States but three more if Alaska and Hawaii are included, for seven altogether. In Table 2, I list the various nations with more than one time zone, with the warning that I am not sure about China. According to my maps, Manchuria is in Zone 21, while all the rest of China is declared in Zone 20, even though the land stretches westward across Zone 19, 18 and 17. I suspect that most of the Chinese west follows its own local standards and that the official time means little.

Table 2

Nation	*Number of Time Zones*
Soviet Union	11
United States	7
Canada	7
Mexico	3
Brazil	3
Indonesia	3
Australia	3
Pakistan	2
Congo	2
China	2

There are other complications, too. There are some places which

prefer not to choose between the coarse division of one hour or the next. If they are near the boundary between two zones they may prefer to place themselves on the half-hour mark. Thus, Iran, which is partly in Zone 15 and partly in Zone 16, declares all of itself to be in Zone 15.5. In other words, when it is noon in London, it is 3:30 P.M. in Iran. Similarly Afghanistan is in Zone 16.5, India in Zone 17.5 and Burma in Zone 18.5.

There are even odder decisions. Guyana, the new nation on the northern coast of South America, is in Zone 8.25. A few patches of the Earth are without any legal time zones at all. These include places like the Mongolian People's Republic, Saudi Arabia, Greenland, and Antarctica.

Daylight Saving introduces other complications with which I won't get involved in here. In addition, there is the matter of the International Date Line, which I hope to take up next month.

From what I've said then, you can see that the time zones, so simple and regular in concept, are forced by the practical state of things to writhe like wounded snakes (and to shift from time to time, too). I wish I could describe each time zone but words are inadequate. Instead, I will, for your amusement, list in Table 3, the largest city in each time zone.

Then, in order to get *all* the details, I recommend that you study a good, large-scale, multi-color map. If you're anything like me, by the time you come up for air, you will find that your own local time has somehow advanced several hours and a load of work remains to be done.

But there might be a gain, too. For instance, I have it perfectly clear now that I am in Zone 7 and Tony Boucher is in Zone 4 and when it is 9 A.M. on my clock it is 6 A.M. on his.

Table 3

Zone	*Largest City*	*Zone*	*Largest City*
1	Nome, Alaska	8.5	St. John's, Newfoundland
2	Honolulu, Hawaii	9	Rio de Janeiro, Brazil
3	White Horse, Canada	10	Ponta Delgado, Azores
4	Los Angeles, California	11	Reykjavik, Iceland
5	Denver, Colorado	12	London, England
6	Chicago, Illinois	13	Paris, France
7	New York, New York	14	Moscow, Soviet Union
8	Santiago, Chile	15	Istanbul, Turkey

Zone	*Largest City*	*Zone*	*Largest City*
15.5	Teheran, Iran	19.5	Singapore, Singapore
16	Sverdlovsk, Soviet Union	20	Peking, China
16.5	Kabul, Afghanistan	21	Tokyo, Japan
17	Karachi, Pakistan	21.5	Adelaide, Australia
17.5	Bombay, India	22	Sydney, Australia
18	Novosibirsk, Soviet Union	23	Petropavlovsk, Soviet Union
18.5	Rangoon, Burma	24	Christchurch, New Zealand
19	Djakarta, Indonesia		

Coming next month

In the year 2020, Dr. Polsaker's First Postulate, "Death is a curable disease," is an established fact. The World Health Organization has immunized the world's total population against "natural" death, and a man need fear only death by misadventure. But then, on Isla Caracoles, off the coast of Yucatan, the impossible happens —a "non-accidental" death. In THE FIRST POSTULATE, **Gerald Jonas** tells a story of the impact on one man's life of the strange rebirth of the disease of death.

Also featured next month is **Roger Zelazny's** DEATH AND THE EXECUTIONER, a follow up to his novelet in the April issue. Plus, short stories by **Russell Kirk, Robert M. Green, Jr.,** and **Graham Greene.** The June issue is on sale May 2.

"Happy to hear you're taking the new Max Kearny," writes Ron Goulart. "On the eve of my 34th birthday it's comforting to know I can still write about these young people and the things that interest them, like jive and swing and jitterbugging." Mr. Goulart is a great kidder, but this is seriously and undoubtedly the ghost detective's most direct confrontation with the zeitgeist *of the swinging sixties. Will Max lose his cool when faced with the apparently inscrutable spirits of these times? Read on.*

FILL IN THE BLANK

by Ron Goulart

THE CALICO CAT YOWLED AND came somersaulting down the shadowy attic stairs. It skittered into Ollie's high darkwood bedroom and dived under the bunk bed. Thunder rolled and hard rain battered the stained glass skylight. The heavy wooden window shutters creaked and fought the hard pull of the night wind.

"Why can't I stay up and see the ghost?" asked Ollie from the upper bunk.

At the doorway Patricia Lewin said, "It's past your bedtime, Ollie."

"You could make an exception when there's a ghost roaming around the halls."

"There're no ghosts here, Ollie," said Patricia. "The thunder scared the cat."

"My stomach hurts," said Ollie. "I have to get up."

"No," the slender blonde girl told the boy. "Now I'm letting you sleep in the upper tonight. Don't push things too far."

"Uncle Ogden bought me a bunk bed just for me so I could have variety," said Ollie. "He doesn't care if I sleep high or low. I forgot to put the cap back on the toothpaste. I'd better get up."

"Stay where you are, Ollie. It's after nine, go to sleep."

Lightning flashed and the window glass rattled with the thunder that followed. The calico cat slipped out from under the bed, rolled on its back and punched a paw at a flap of blanket. "See," said the seven year old, "Oscar isn't even ascared of thunder. It

takes a real authentic ghost to make a cat's hair stand up like it was. Why does a cat's fur do that, Patricia?"

"We'll look it up in the morning, Ollie." Patricia narrowed her eyes, watching the long thickly rugged hallway of the mansion.

"My ears hurt when I lay down."

"I'm going to put your lights out now," said the girl. She put her back to the doorway and walked toward the boy's bureau.

"When you lay with your head down probably the whole insides of your head could run out of your ear," said the dark-haired boy.

"We'll look up ears in the morning, Ollie." Patricia glanced at the oval mirror above Ollie's lamp. It gave her a view of the hall. Floating there now, three feet from the floor, was a dusty sheaf of papers. Old, age wrinkled yellow sheets of note paper. As Patricia watched, the small bundle gradually disappeared, like a moon waning in a speeded up film.

The cat let its head loll back and its wide eyes darted a look at the hallway. Yowling again, the cat shinnied up a bedpost and jumped on Ollie's back. "Probably a whole parade of ghosts going by," said the boy, handing Oscar out to Patricia.

The girl tucked the cat against her left breast and turned off the lights in the bedroom. "Night, Ollie," she said. "Don't let anything scare you."

"I don't want to get scared by the ghosts. I just want to get a look at them."

Patricia stepped carefully into the hallway. Thunder rolled again, fainter. Oscar arced his tail and brushed at her cheek. Patricia inhaled deeply, then pressed her lips together. Nearly a month now. She couldn't admit it to Ollie. But it must be ghosts, or one of those poltergeists. They were supposed to like children.

She had been governess for Ollie Boothrod for three months and she liked the job. She'd have to tell Ogden Boothrod, Ollie's uncle and her employer, about the things happening nights up on the third floor of his Presidio Heights mansion. The floating objects, the odd creakings, the footsetps.

Boothrod was in the beamed white kitchen, under the hanging pots and skillets, squinting into a copper kettle on the iron stove. In his long fingered left hand he had a wooden spoon. He was a tall, narrow man, bald with a round polite face. He was just forty and his brown rimmed glasses were steamed. After dipping the spoon carefully into the kettle, Boothrod stepped back. "I can't remember about the carrot."

Patricia dropped Oscar on the parquet and the cat jumped for a sliver of chicken that had fallen off the big wood butcher's table. "Mr. Boothrod," began the girl.

"The veal knuckle is in," said

Boothrod, sniffing the spoon. "I can't see the carrot or detect its flavor. Still, if I add one now and there's already a carrot that'll make two. Which will blow the stock for sure."

"Mr. Boothrod. Is there anything in the traditions of this house to indicate, well, unnatural phenomena?"

Boothrod scratched the chest of his striped chef's apron. "You taste this, Patricia. See if you can sense the presence or absence of one large sliced carrot." He held the wooden spoon to her. "Boothrod Manor was built in 1876. My great-grandfather, Omer Boothrod, was a typical San Francisco banker and land pirate. There was Uncle Oscar. Uncle Oscar. How does that taste?"

"It tastes like hot water, Mr. Boothrod."

"My impression, too." He shook his head. "After three hours of simmering with a four to five pound washed and trussed fowl in there, not to mention ten whole peppercorns, you'd expect more than a warm tap water flavor. I can't move on to anything else without good stock to work with. Stock is everything in cooking, to paraphrase Escoffier."

"Was your Uncle Oscar murdered, violently done in up in the attic maybe?"

"No, he fell off the gazebo just before the quake," said Boothrod. "He was always dabbling."

"Dabbling?"

"On the borders of science and medicine," said her employer. "Don't you have a friend who's an expert on cooking matters?"

"Jillian Kearny," said Patricia, brightening. "She's a professional food consultant, works for advertising agencies here in San Francisco. And her husband is . . ."

"Is what?"

"Oh," said the girl, "he's an art director with an agency. Why don't I invite them over. Tomorrow night?"

Boothrod nodded. "That's swell, Patricia. Ask them for dinner. They won't object to the fact that I believe Ollie's governess should be treated as one of the family and share the family table? No, fine. I'll prepare one of my full course awful dinners, and Mrs. Kearny can criticize each terrible part of it as we dine. As to dinner this evening—"

"I'll pop down to that little French place on Laurel. I can stop by the Kearny's flat afterwards; it's near there."

"I suppose I can salvage enough fowl out of the stock to fix myself a chicken sandwich," said Boothrod. "Are you certain the thunder and lightning and rain won't make going out too much of a hazard?

"I like to walk in the rain," the girl said. She smiled and left the kitchen. Maybe Max Kearny was exactly the right person to invite to Boothrod Manor.

The man with the shoulder length red hair slapped down into the theater seat next to Max Kearny. He reached across Max and shook hands with Max's slim, auburn haired wife. "Hi, Jill, Max. Welcome to my premiere."

"How'd you get your hair to grow so fast, Misch?" said Max.

Misch McBernie dutch rubbed Max's crewcut. "It's a wig. The moustache is authentic. I'm in a transition period, Max, Jill. From $25,000 a year junior account executive on Doob's Cottage Cheese to psychedelic playwright in just two brief months. A difficult life period. Rebecca's left me."

Jillian Kearny said, "We didn't know that, Misch."

Misch shot the cuffs of his orange shirt out beyond the sleeves of his paisley suit. "I'm not one to broadcast self pity, Max, Jill. Rebecca simply didn't comprehend the point that if I don't get in on the youthquake now, I won't ever have another chance. My god, I'm twenty-eight."

Max, who was thirty-four, said, "With that wig you could pass for twenty-two."

The big man chuckled. "I get real charismatic when I'm around these kids, these beautiful young people. So when the Fatal Glass Of Beer offered to produce my second play with some of their money, I hopped right in. I'm expanding."

"We're looking forward to seeing the play," said Jillian.

Misch tapped the Mickey Mouse watch on his wrist. "Curtain is going to be delayed," he said, gesturing at the fifty or so young people in the small North Beach theater. "These kids aren't time bound. Curtain at eight-thirty, that's a tradition meaning nothing to them."

"Why is it late?" asked Max.

"See, you've got the over thirty establishment mind," grinned Misch. "The cops are backstage frisking the Washington Merry-Go-Round. They think the electric sitar player is holding grass.

"Are these folk rock groups going to be in your play?" asked Jillian, as a girl in a yellow and lavendar mother hubbard sat down in front of her.

"Yes, they form the Greek chorus," said Misch. "The Washington Merry-Go-Round and the Fatal Glass Of Beer will both be on stage. Except for Lupo, Fatal's electric tambourine man, because he got busted for selling a book of pornographic Chinese love lyrics."

"Been several down with pornography raids lately," said Max.

"Not only the fuzz," said Misch. "All kinds of dingbat groups. Especially a bunch who call themselves Comstock:2. They've even been phoning me and telling me not to put on *The Lightbulb,* my play tonight. Comstock:2, they're against everything. Fill in the blank. They're against it."

"They really think your play is lewd?" said Jillian.

"Well, they got word that Joan of Arc isn't going to wear any clothes and it unsettled them," said Misch. "Actually *The Lightbulb* isn't dirty in any traditional sense. Whatever so-called dirty words are in the dialogue are drowned out when the folk rock kids play their electric blues anyway."

The theater lights went out and the art nouveau rolled up. The audience murmured, grew quiet. On the bare stage three people stood next to a darkened phonebooth.

"Joan of Arc, Secretary Rusk and Humphrey Bogart," explained Misch in a whisper.

"Bogart in the trenchcoat," said Max. "I guessed him."

The actor playing Secretary of State Rusk pointed at the phonebooth and said, "Crap."

Joan of Arc, in a violet swimsuit, started to reply. Instead, she rose four feet in the air, floated toward the phonebooth. She screamed and waved her arms. Humphrey Bogart's trench coat jumped up, bunching around his head, and Dean Rusk yelled and sailed off the stage and into the front row seats. Joan of Arc, still floating, knocked over the phonebooth.

"Great special effects," said Max.

"Holy moley," yelled Misch. He leaped up and went running for the stage. "Where are you dingbat establishment bastards? Stop tampering with the mood of my play."

Joan of Arc flew straight into him, the lights snapped out and the audience began roaming.

"Another fuzz stunt," said the girl in the mother hubbard.

Jillian caught Max's hand. "Max, what did that?"

Max shrugged. "I more or less gave up occult investigation when we got married. I'm just an over thirty AD now."

"Unless Misch is putting us on," said his wife, "something occult caused all the frumus up there. Ghosts or magic spells?"

The lights blossomed on and Max took Jillian by the arm. "You know, there have been several odd things like this happening lately. Two hundred copies of that book of anti-Vietnam limericks that set themselves on fire in the window of the Modern Times bookshop, that psychedelic blues singer who floated out the window of the Yardbird Suite and the Love & Freedom Brigade girl who was apparently attacked by a bunch of her own lapel pins."

"Where'd you hear about those?"

"In Herb Caen's column," said Max. "A ghost patrol, some conservative warlocks. Who, I'm not sure yet."

Misch had himself untangled from Joan of Arc and was jumping up and down on the stage. Three uniformed policemen were peeking out of the wings.

"Let's wait in the lobby for Misch," said Max.

"Too bad the play got spoiled. I wanted to find out what was wrong with the phonebooth.

"Lightbulb didn't work. Like society."

They moved for the lobby and Max was pushed against a door jamb by two blond boys in checkered suits. He side-looked at his elbow as it scraped against a protruding nail head. Max took three steps, halted, stopped Jillian. He waited until the last of the audience, three Negro girls in red leather pants suits, exited.

"Huh," said Max. He reached out and touched the nail. He had felt a round head, but the nail he saw seemed headless. Gingerly he pinched it. The tip of his finger disappeared.

"What are you doing with your finger, Max?"

Max felt rough cloth where his finger end had vanished. "It's a piece of cloth."

Reaching out, Jillian asked, "It makes things invisible?" She touched his unseen finger tip. "Feels like monk's cloth, some rough cloth."

Max took the swatch and dropped it in his pocket. "With a whole suit of this stuff, or a cloak —"

"You'd be invisible."

"And if you lifted up Joan of Arc and tossed," said Max, "you'd give the impression she was floating."

"Good thing she wasn't in armor," said Jillian. "So whoever disrupted *The Lightbulb* came by here, snagged himself on the nail either sneaking in or getting away."

Max shook out a filter cigarette and fitted it into a filter holder. "The occult detection thing has always been just a hobby with me. My real profession should be advertising. No reason to get involved in tracking down a bunch of invisible men."

"Come on," said his wife. "Advertising isn't a real profession. Besides, putting on an invisible suit and throwing three actors and a phonebooth off a stage, that's a violation of civil rights. Not to mention those attacks on other people."

Max said, "Yeah, I'll get involved."

Patricia Lewin was sitting on their Victorian doorstep, hands in pockets and knees tight together. Max helped her up, digging out the door keys.

"I decided to wait," said the girl. "Hello, Jillian."

"It's nearly midnight," said Jillian. "Is there trouble over at that mansion where you work?"

"The place is haunted," said Patricia.

"No," said Max, pushing the thick door open and standing aside. "No, I'm not going to listen."

"Max already has an occult case to work on," said Jillian when they were in the Kearny flat.

"Not being much up on the occult business," said Patricia, "I don't know if you can handle two occult problems at once or not."

"It's not a business," said Max. "A hobby."

"Tell him anyway," said Jillian. "Coffee?"

"Fine," said Patricia. She sat in a yellow wicker armchair. "You have a new rug, Jill?"

"Three hundred dollars worth of Bokhara," said Max. "Bought behind my back from a couple of Armenians in an alley."

"The problem," said Jillian.

Patricia said, "As you know, Max, I work as a governess in a gloomy Victorian mansion up hill from here. I look after a bright seven year old boy and help him with his lessons. For the past month a series of odd things has been happening."

"Your boss is a mysterious dark man and he never lets you go into the north wing?" said Max.

"He's bald and affable, works in a brokerage firm. He's an amateur gourmet chef, Jill. The only place I can't go is the basement, because that's been converted into an apartment and Mr. Boothrod's nephew and two of his friends live there. Richard C. Karno is his name and I think he's sort of conservative."

Max had picked the brandy bottle from the mantle. He set it back. "What?"

"Mr. Boothrod is an amateur gourmet."

Max shook his head. "Richard C. Karno lives in your basement?"

"In Mr. Boothrod's gloomy Victorian basement."

"Karno," said Jillian, bringing in the china coffee pot. "We saw him interviewed on Channel Nine."

"Yeah," said Max, "he's the head of Comstock:2, the group group that's been hounding Misch." He frowned at Patricia. "Exactly what's happening at the Boothrod place?"

"Things float," said the blonde.

"And?"

"Or vanish. Sometimes I hear footsteps and don't see anybody. The attic. Lots in the attic I hear scraping noises. My notion is that Ollie, he's the one I governess for, he probably attracts ghosts. The way children do. Don't they?"

"Teenage girls," said Max. "Not six year old boys."

"Ollie is seven."

"Still," said Max. "Pat, I'd like to get inside that mansion."

Patricia smiled from Max to Jillian. "Mr. Boothrod wants you to come to dinner tomorrow night, around eight-thirty. He's an awful cook."

"We'll be there," Max said.

"Maybe Richard C. Karno was wearing the trick suit," said Jillian while she poured coffee.

"You married people," said Patricia. "You have all kinds of personal slang outsiders can't fathom."

From the rainy street sprang the sound of a guitar. Max crossed to the bow window. "Seems to be Misch McBernie and the Washington Merry-Go-Round." A Volkswagen bus with violet roses painted on its sides was parking in the driveway of the Kearnys' building.

At his side Jillian said, "That's not the Washington Merry-Go-Round, it's the Fatal Glass Of Beer."

"That's right," said Max. "I recognize the guy with the paisley tattoos."

"Are you having a party?" asked Patricia.

"Nope," said Max, his hand closing over the small piece of invisible cloth in his coat pocket. "Just another one of my clients."

On the way to work the next morning, Max stopped in at Pedway's Book Store. W. R. Pedway was a small, tense man with straight standing white hair. He had talked Max into buying a remaindered occult encyclopedia six years back and shortly after started him on his career as an amateur ghost breaker and occult investigator. Max still came to Pedway for advice.

Pedway was pulling up the big shades in the secondhand shop windows, grimacing at the misty rain. "I hear that in Los Angeles they held a drive-in black mass last week," he said to Max.

"You can't do anything in LA without a car." From his pocket Max took the invisible swatch. "Can you identify this for me?"

Pedway took the sample and wrapped it around his thumb, which disappeared down to the first joint. "Piece of home woven cloth torn from a cloak of invisibility. Where'd you come by it?"

Max told him, and about Misch's play and Richard C. Karno's group and the rest. Then he asked, "Anything in the history of the old Boothrod mansion to tie it in with magic? Our friend, Pat Lewin, mentioned an Oscar Boothrod who fooled around with alchemy in the 1890s."

Pedway unwound the cloak fragment and this thumb came back. He set the sample on his counter and shifted a stack of air pulps. Underneath was a dime store scrapbook. "I'm considering putting a lot of my files into a computer," he said, flipping the book open. "I can't get the style computer I want."

"Which is?"

"Black Forest." Pedway flicked pages. "Here. Oscar Boothrod was a pioneer in steam aerodynamics."

"You mean he made an airplane back in 1890 that flew on steam?"

"No, he was a bird fancier, too. He invented a steam-driven seagull. Got a patent on it," said Pedway. "He also leaned in the direction of alchemy. Signed a pact with the devil."

"How do you know that?"

"He had the pact notarized. I got a copy of the records." Pedway dropped the open scrapbook. "There were rumors in the 90's that Oscar had cracked the invisibility barrier. Even a story in the Examiner, in the fashion section, hinting he'd loomed a couple of cloaks of invisibility. Only rumors."

"Oscar Boothrod's files, maybe even the cloaks," said Max, leaning against a table of girls' series books, "the stuff could have been stored in the attic at the mansion."

"Exactly," replied Pedway. "Oscar was still tinkering with invisibility when he fell off a gazebo. He was up there waiting for his steam gull to home."

"How can you counter this kind of magic invisibility?"

"Boothrod's solution to the problem may have been magic and it may have been alchemical. I'll give you something for both angles," said Pedway. "You planning to go up against this Richard C. Karno and his Comstock:2?"

"If he's using the stuff, yes. We're going over to the Boothrod mansion for dinner tonight and Karno lives in the basement."

Pedway lifted the invisible cloth. "I saw a play by your friend, McBernie. They put it on in an all night cafeteria out in Potrero Hills. Called *The Towelrack.* Lyndon Johnson, James Dean and Bo Diddley are in a wash room trying to get the towelrack to work."

"Yeah, well," said Max. "Somebody has to defend the right to be lousy."

"Makes a nice crusade." Pedway bobbed, reached under the counter. "I'll give you two spells and some powder I got from an alchemist over in Oakland who went bankrupt. Should turn the cloak visible, probably permanently. We can try it out on this little piece first." He had fetched up a leather-bound book and a plastic pill bottle filled with yellow grains of powder. "I'll read the spells and you shake some of this powder on the cloth. Okay?"

Max snapped the lid off the powder container. "This says take one spoonful in an ounce of water four times a day."

"Not the bottle it came in." Pedway began muttering and Max shook the yellow powder.

There was a faint sizzling sound and a square of brown cloth appeared atop the counter.

"Not much of a shade," said Pedway.

When Max left the store he had the two spells and the powder in his briefcase.

Max stood under a striped sandwich shop awning on Montgomery Street, trying not to watch a pale man with rimless glasses chewing a baloney sandwich. Two lunch hour secretaries walked by, one saying, "If you like chicken I know a place."

Across the wet street was a small

store front office labeled Comstock:2. A poster on the door said, "Clean Mind, Clean Body, Clean Air, Clean Water, Clean Streets."

Max sprinted over, went into the Comstock:2 office. There was nothing in the low rugless room but a card table piled with pamphlets and broadsides, next to it a straight-standing young man in a navy blue suit. Three air conditioners hummed, one in each wall.

"Refreshing in here, isn't it?" said the man. He talked like a ventriloquist, lips stiff. He was Richard C. Karno.

"Feels clean."

"Comstock:2 is against pollution," said Karno. "We've successfully cleaned up the air in two major California's cities. We've unpolluted the water in an important river's tributary. Closed down three lithographers who specialized in girl calendars and caused the picketing of four hundred and three newsstands."

"I guess I can't smoke in here?"

"No, it would pollute," said Karno. "How can I help you?"

"I thought I'd pick up some of your literature."

"Here you have our newest. Entitled *Four Hundred And Sixty-Two Pounds Of Smut.*"

"Your own title?"

"Yes. It refers to the amount of smut the average blue-eyed blonde-haired little seven-year-old girl passes on her way to Sunday school."

"How did you figure that?"

"We bought some smut and weighed it." Karno touched the tip of his chin, bent over the card table. "I think I'll give you one each of our booklets and a Comstock:2 bumper sticker, which says, 'Don't let your blue-eyed blonde-haired little girl be ruined by smut.'"

"Won't fit on the average bumper."

"I have to admit to a slight overlap," said Karno as he made Max a bundle of Comstock:2 literature.

"Would you have anything on magic?" asked Max, raking the material off the table and into his briefcase. "Spells, transmutation, invisibility, dowsing?"

Karno had a Comstock:2 lapel button in his hand. He jabbed the pin into his thumb and said, "What was your name, sir?"

"I'm just an average blue-eyed blond average citizen."

"You don't have blue eyes or blond hair," said Karno, who had both. "Please return my reading matter and leave."

Max jammed the briefcase under his arm and backed quickly out. Across the street the pale man was still at his sandwich.

Black, three stories high, at the top of a zigzag flagstone path, was the Victorian Boothrod mansion. The rain had stopped. Thin fog was tumbling down over the tree tops and gliding across the brush thick grounds.

Max took his hand from Jillian's and rang the bell. The two spells were in his coat pocket wrapped around the yellow powder.

Jillian sniffed. "I think I can smell dinner going awry."

"People don't use the word awry in real life. Only in Misch McBernie plays."

"By the way, did you see Misch this morning?" asked his wife. "I forgot to tell you."

"When? No, I didn't."

"Right after you left for Pedway's. He came by in a pastel bus with a group called The Bayshore Freeway. Misch said a lightbulb had gone off over his head and he wanted to see you. I told him where you were headed."

"No," said Max, poking the bell again. "He must have missed me."

The carved door swung in and a dark-haired little boy looked out. "Are you the ghost breaker?"

"Yeah," said Max. "You Ollie?"

"Uncle Ogden is out in the kitchen with a flat souffle and he won't listen to me but Cousin Richard caught Patricia exploring the attic, which she said your wife told her was loaded probably with arcane lore, and they've got her, I bet all tied up by now, in their rooms downstairs."

"Did you call the cops?"

"On occult matters I thought I might as well wait for a specialist," Ollie told them.

"How do I get to Richard's flat?"

"Go around the house, through the arbor and then there's an orange door down some stone steps. Better sneak, though."

Behind the boy Ogden Boothrod appeared. "Mrs. Kearny, I've got a really terrible halibut mousse inside. Can you come in and inspect it and tell me where I went astray?"

"Awry," said Jillian. "Shall I stick with you, Max?"

"No. Get inside."

"I lost control of the dill weed," Boothrod explained, ushering Jillian in. Ollie started out but Jillian caught him back.

Max moved into the tall, wet grass along the gravel path which circled the house, then nudged into the high bushes. Leaves suddenly spattered him, and a bus engine roared in the fog. Max jumped, and a violet and crimson bus shot by and braked, stopping against the mansion's gingerbread side. Lettered on the bus was The Fatal Glass Of Beer.

A scarlet motor scooter and three lemon yellow motorcycles came fast in the wake of the bus. One of the cycles had a sidecar and in it, his red hair flying, was Misch McBernie. "Max, I've been dogging your footsteps and I know all," shouted Misch. "I got a lightbulb over the head when I got to thinking about what your friend, Patricia, was telling me at your place last night." He leaped to the dark lawn. "When I missed you at Pedway's I had a chat with him

and confirmed my hunch that the plot against me centered here. I got my kids rounded together and decided to coincide my invasion with yours. It should be beautiful."

"Quiet," said Max. "How the hell do you think you're going to sneak up on anybody in yellow motorcycles?"

"Blitzkriegs don't have to be subtle."

The door of the bus hissed open and the Fatal Glass Of Beer jumped out, each in bellbottom pants, leather vests and Indian headbands. "Crap," said the lead man and Max recognized him as the actor who'd played Dean Rusk.

The driver of Misch's motorcycle was dressed General Custer style, except for a hand-painted hula-girl necktie. The other cycles held the rhythm section of the Washington Merry-Go-Round. Three Negro girls in red leather pants suits climbed out of the bus. A young man in an orange levi suit began unloading amplifiers from the luggage bin.

Max said to Misch, "Back off. They've got Pat in their apartment."

Misch flew into the air, arms flapping, and landed against the scooter.

An invisible fist punched Max in the nose. He ducked, twisted sideways and yanked out the spells and powder. He read the backwards Latin and scattered yellow grains. No one appeared. Then a karate chop caught Max from behind and he slammed to his knees.

"It's the invisible guy," said one of the Fatal Glass Of Beer. They all jumped.

Somebody expelled breath. Max shook his head clear and palmed himself upright. He threw powder at the stack of folk rock singers and repeated the spells. The wet grass sizzled and in a moment Richard C. Karno materialized beneath the Fatal Glass Of Beer, wearing a full length brown robe.

"I like his gear," said the tallest Negro girl.

"Where's Pat?" Max said, down next to the pile on.

"Not a clean mind or body in the lot," said Karno, after a stiff-necked survey.

"Where is she?"

"Well," said the Comstock:2 leader, "she's in the den with two of my lieutenants."

"Invisible ones?"

"You find out," said Karno.

Max ran for the orange door, followed by Misch.

Misch pushed ahead of Max and galloped halfway down a buff hallway before he tripped over nothing and spread-eagled. Max said the spells and tossed powder and the round man who'd tripped Misch appeared. Max knocked him out.

The guard with Patricia was visible, tall and straight standing.

"They've only got two cloaks," said Patricia, who was tied in a

claw-footed chair. "They found them up in the attic when Richard was snooping around last month. Since then they've been smuggling Oscar Boothrod's notes and papers down here, hoping to get the formula for making more cloaks."

"All we've unearthed so far," admitted the unarmed guard, "is nearly nineteen volumes of old Oscar's pornographic memoirs."

Max said, "Your cloaks are neutralized for good, meaning no more invisible vigilante raids. I think you better spend the rest of tonight moving out."

"Dick's got a lease."

"Or maybe Patricia will come up with a kidnapping charge."

"She was poking in the attic and Dick brought her here to see how much she knew about us, and about old Oscar."

"Move," said Max. He untied Pat, helped her get her arms and legs working.

Misch had gone back outside, after trussing up the other Comstock:2 member with three hand painted ties and a paisley belt. Ogden Boothrod was talking to him near the bus. The Fatal Glass Of Beer were tuning instruments in the arbor. Jillian and Ollie were examining the motorcycles.

"Mr. Boothrod has invited us all to dinner," announced Misch. "He says the food will be really terrible."

Max led Patricia over to Jillian and Ollie. Putting his arm around his wife's shoulders, he asked, "Want to stay?"

"No," said Jillian. "As a cook he's beyond help."

They said goodnight and walked away from the spires and towers of the mansion.

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