

Murray Leinster

#### EXPLORATION TEAM

"Murray Leinster" was one of the writing names used by the late William Fitzgerald Jenkins, who also wrote as "Will F. Jenkins" and employed another half-dozen pseudonyms. Although he wrote copiously in many other fields, turning out millions of words of pulp stories, little of it other than the science fiction work he produced as Murray Leinster is known today--and, in fact, little outside of his SF work gained much attention even during his lifetime. As Murray Leinster, though, Jenkins had a profound and lasting effect on the development of modern science fiction.

"Leinster" sold his first SF story to Argosy in 1919, had work published in Hugo Gernsback's *Amazing* during the '20s, and went on to be one of the mainstays of John W. Campbell's "Golden Age" *Astounding* in the '40s and '50s, where most of his best work appeared. Most of Leinster's novels are heavily dated and long forgotten--one of the few figures of the day who made his reputation almost entirely on his short fiction, he was somehow never able to make much of an impact with his novels, which were widely regarded as inferior to his short work even during his working lifetime-- but the best of his short stories remain fresh and powerful today. In his short work, Leinster more or less invented several subgenres still active today: for instance, he is credited with writing one of the first Alternate History stories, "Sideways In Time," and one of the earliest First Contact stories, the famous "First Contact," and both stories still hold up as among the best treatments of their subjects. Also among his most famous stories is the taut, suspenseful, and scary tale that follows, "Exploration Team," which won Leinster his only Hugo Award in 1956, and which is practically the model of how to write an intricate and intelligent adventure set on an alien world, a story which has been an influence on--if not indeed the inspiration for--countless other stories and novels, as well as television shows and movies, over the years. Nobody before Leinster had ever written the tale of Terran explorers battling a hostile alien planet any better than he wrote it here--and, you know what? Forty years late--nobody has done it any better yet.

Leinster's best novel is probably *The Wailing Asteroid*, above-average among Leinster novels for imagination and evocativeness, with some quirky detail work that holds up fairly well. His other novels include *The Pirates of Zan*, *The Forgotten Planet*, *The Greks Bring Gifts*, and *The War with the Gizmos*. "Exploration Team" was collected, with other Survey Team stories, as *Colonial Survey*, one of his best collections. His "Med Service" series--not as successful as his Survey Team stories, but still of interest--was collected in *S.O.S. from Three Worlds and Doctor to the Stars*; there were also two Med Service novels, *The Mutant Weapon* and *This World Is Taboo*. Other Leinster collections include *Monsters and Such* and *The Best of Murray Leinster*.

Almost all of Leinster's books are long out-of-print, and almost impossible to find; you probably have the best chance of finding *The Best of Murray Leinster*, published in 1978, in a used-book store, but even that's rather unlikely these days. Fortunately, NESFA Press has just brought out a big retrospective anthology of his work, *First Contacts: The Essential Murray Leinster* (NESFA Press, P.O. Box 809, Framingham, MA 07101-0203, \$27), which features most of his best stories. Buy it while you still can, since much of this work is unfindable anywhere else.

A multi-talented man, Will Jenkins, the person behind the Murray Leinster mask, was a successful inventor as well as an author--having created, among other things, a front-projection method for filming backgrounds still used in the film industry today, where it is known as the "Leinster Projector." During World War II, he also came up with an ingenious method for

disguising the wake left by submarine periscopes that probably saved the lives of thousands of submarine sailors over the course of the war. He died in 1975.

I

The nearer moon went by overhead. It was jagged and irregular in shape, and was probably a captured asteroid. Huyghens had seen it often enough, so he did not go out of his quarters to watch it hurtle across the sky with seemingly the speed of an atmosphere-flier, occulting the stars as it went. Instead, he sweated over paper work, which should have been odd because he was technically a felon and all his labors on Loren Two felonious. It was odd, too, for a man to do paper work in a room with steel shutters and a huge bald eagle-untethered-dozing on a three-inch perch set in the wall. But paper work was not Huyghens' real task. His only assistant had tangled with a night-walker and the furtive Kodius Company ships had taken him away to where Kodius Company ships came from. Huyghens had to do two men's work in loneliness. To his knowledge, he was the only man in this solar system.

Below him, there were snufflings. Sitka Pete got up heavily and padded to his water pan. He lapped the refrigerated water and sneezed violently. Sourdough Charley waked and complained in a rumbling growl. There were divers other rumblings and mutterings below. Huyghens called reassuringly, "Easy there!" and went on with his work. He finished a climate report, and fed figures to a computer, and while it hummed over them he entered the inventory totals in the station log, showing what supplies remained. Then he began to write up the log proper.

"Sitka Pete," he wrote, "has apparently solved the problem of killing individual sphexes. He has learned that it doesn't do to hug them and that his claws can't penetrate their hide-not the top hide, anyhow. Today Semper notified us that a pack of sphexes had found the scent-trail to the station. Sitka hid downwind until they arrived. Then he charged from the rear and brought his paws together on both sides of a sphex 's head in a terrific pair of slaps. It must have been like two twelve-inch shells arriving from opposite directions at the same time. It must have scrambled the sphex 's brains as if they were eggs. It dropped dead. He killed two more with such mighty pairs of wallops. Sourdough Charley watched, grunting, and when the sphexes turned on Sitka, he charged in his turn. I, of course, couldn't shoot too close to him, so he might have fared badly but that Faro Nell came pouring out of the bear quarters to help. The diversion enabled Sitka Pete to resume the use of his new technic, towering on his hind legs and swinging his paws in the new and grisly fashion. The fight ended promptly. Semper flew and screamed above the scrap, but as usual did not join in. Note: Nugget, the cub, tried to mix in but his mother cuffed him out of the way. Sourdough and Sitka ignored him as usual. Kodius Champion 's genes are sound!"

The noises of the night went on outside. There were notes like organ tones-song lizards. There were the tittering giggling cries of nightwalkers-not to be tittered back at. There were sounds like tack hammers, and doors closing, and from every direction came noises like hiccups in various keys. These were made by the improbable small creatures which on Loren Two took the place of insects.

Huyghens wrote out:

"Sitka seemed ruffled when the fight was over He painstakingly used his trick on every dead or wounded sphex, except those he'd killed with it, lifting up their heads for his pile-driver-like blows from two directions at once, as if to show Sourdough how it was done. There was much grunting as they hauled the carcasses to the incinerator It almost seemed--"

The arrival bell clanged, and Huyghens jerked up his head to stare at it. Semper, the eagle, opened icy eyes. He blinked.

Noises. There was a long, deep, contented snore from below. Something shrieked, out in the jungle. Hiccups. Clatterings, and organ notes— The bell clanged again. It was a notice that a ship aloft somewhere had picked up the beacon beam—which only Kodiak Company ships should know about—and was communicating for a landing. But there shouldn't be any ships in this solar system just now! This was the only habitable planet of the sun, and it had been officially declared uninhabitable by reason of inimical animal life. Which meant sphexes. Therefore no colony was permitted, and the Kodiak Company broke the law. And there were few graver crimes than unauthorized occupation of a new planet.

The bell clanged a third time. Huyghens swore. His hand went out to cut off the beacon—but that would be useless. Radar would have fixed it and tied it in with physical features like the nearby sea and the Sere Plateau. The ship could find the place, anyhow, and descend by daylight.

"The devil!" said Huyghens, But he waited yet again for the bell to ring. A Kodiak Company ship would double-ring to reassure him. But there shouldn't be a Kodiak Company ship for months.

The bell clanged singly. The space phone dial flickered and a voice came out of it, tinny from stratospheric distortion:

"Calling ground! Calling ground! Crete Line ship Odysseus calling ground on Loren Two. Landing one passenger by boat. Put on your field lights."

Huyghens' mouth dropped open. A Kodiak Company ship would be welcome. A Colonial Survey ship would be extremely unwelcome, because it would destroy the colony and Sitka and Sourdough and Faro Nell and Nugget—and Semper—and carry Huyghens off to be tried for unauthorized colonization and all that it implied.

But a commercial ship, landing one passenger by boat— There was simply no circumstances under which that would happen. Not to an unknown, illegal colony. Not to a furtive station!

Huyghens flicked on the landing-field lights. He saw the glare in the field outside. Then he stood up and prepared to take the measures required by discovery. He packed the paper work he'd been doing into the disposal safe. He gathered up all personal documents and tossed them in. Every record, every bit of evidence that the Kodiak Company maintained this station went into the safe. He slammed the door. He touched his finger to the disposal button, which would destroy the contents and melt down even the ashes past their possible use for evidence in court.

Then he hesitated. If it were a Survey ship, the button had to be pressed and he must resign himself to a long term in prison. But a Crete Line ship—if the space phone told the truth—was not threatening. It was simply unbelievable.

He shook his head. He got into travel garb and armed himself. He went down into the bear quarters, turning on lights as he went. There were startled snufflings and Sitka Pete reared himself very absurdly to a sitting position to blink at him. Sourdough Charley lay on his back with his legs in the air. He'd found it cooler, sleeping that way. He rolled over with a thump. He made snorting sounds which somehow sounded cordial. Faro Nell padded to the door of her separate apartment—assigned her so that Nugget would not be underfoot to irritate the big males.

Huyghens, as the human population of Loren Two, faced the work force, fighting force, and—with Nugget—four-fifths of the terrestrial nonhuman population of the planet. They were mutated Kodiak bears, descendants of the Kodiak Champion for whom the Kodiak Company was named. Sitka Pete was a good twenty-two hundred pounds of lumbering, intelligent carnivore. Sourdough Charley would weigh within a hundred pounds of that figure. Faro Nell was eighteen hundred pounds of female charm—and ferocity. Then Nugget poked his muzzle around his mother's furry rump to see what was toward, and he was six hundred pounds of ursine infancy. The animals looked at Huyghens expectantly. If he'd had Semper riding on his shoulder, they'd have known what was expected of them.

"Let's go," said Huyghens. "It's dark outside, but somebody's coming. And it may be bad!"

He unfastened the outer door of the bear quarters. Sitka Pete went charging clumsily through it. A forthright charge was the best way to develop any situation—if one was an oversized male Kodiak bear. Sourdough went lumbering after him. There was nothing hostile immediately outside. Sitka stood up on his hind legs—he reared up a solid twelve feet—and sniffed the air. Sourdough methodically lumbered to one side and then the other, sniffing in his turn. Nell came out, nine-tenths of a ton of daintiness, and rumbled admonitorily at Nugget, who trailed her closely. Huyghens stood in the doorway, his night-sighted gun ready. He felt uncomfortable at sending the bears ahead into a Loren Two jungle at night. But they were qualified to scent danger, and he was not.

The illumination of the jungle in a wide path toward the landing field made for weirdness in the look of things. There were arching giant ferns and columnar trees which grew above them, and the extraordinary lanceolate underbrush of the jungle. The flood lamps, set level with the ground, lighted everything from below. The foliage, then, was brightly lit against the black night-sky—brightly lit enough to dim-out the stars. There were astonishing contrasts of light and shadow everywhere.

"On ahead!" commanded Huyghens, waving. "Hup!"

He swung the bear-quarters doorshut. He moved toward the landing field through the lane of lighted forest. The two giant male Kodiaks lumbered ahead. Sitka Pete dropped to all fours and prowled. Sourdough Charley followed closely, swinging from side to side. Huyghens came alertly behind the two of them, and Faro Nell brought up the rear with Nugget following her closely.

It was an excellent military formation for progress through dangerous jungle. Sourdough and Sitka were advance-guard and point, respectively, while Faro Nell guarded the rear. With Nugget to look after, she was especially alert against attack from behind. Huyghens was, of course, the striking force. His gun fired explosive bullets which would discourage even sphexes, and his night-sight—a cone of light which went on when he took up the trigger-slack—told exactly where they would strike. It was not a sportsmanlike weapon, but the creatures of Loren Two were not sportsmanlike antagonists. The night-walkers, for example—But night-walkers feared light. They attacked only in a species of hysteria if it were too bright.

Huyghens moved toward the glare at the landing field. His mental state was savage. The Kodiak Company station on Loren Two was completely illegal. It happened to be necessary, from one point of view, but it was still illegal. The tinny voice on the space phone was not convincing, in ignoring that illegality. But if a ship landed, Huyghens could get back to the station before men could follow, and he'd have the disposal safe turned on in time to protect those who'd sent him here.

But he heard the faraway and high harsh roar of a landing-boat rocket—not a ship's bellowing tubes—as he made his way through the unreal-seeming brush. The roar grew louder as he pushed on, the three big Kodiaks padding here and there, sniffing thoughtfully, making a perfect defensive-offensive formation for the particular conditions of this planet.

He reached the edge of the landing field, and it was blindingly bright, with the customary divergent beams slanting skyward so a ship could check its instrument landing by sight. Landing fields like this had been standard, once upon a time. Nowadays all developed planets had landing grids—monstrous structures which drew upon ionospheres for power and lifted and drew down star ships with remarkable gentleness and unlimited force. This sort of landing field would be found where a survey-team was at work, or where some strictly temporary investigation of ecology or bacteriology was under way, or where a newly authorized colony had not yet been able to build its landing grid. Of course it was unthinkable that anybody would attempt a settlement in defiance of the law!

Already, as Huyghens reached the edge of the scorched open space, the night-creatures had rushed to the light like moths on Earth. The air was misty with crazily gyrating, tiny flying things. They were innumerable and of every possible form and size, from the white midges of the night and multi-winged flying worms to those revoltingly naked-looking larger creatures which might have passed for plucked flying monkeys if they had not been carnivorous and worse. The flying things soared and whirred and danced and spun insanely in the glare. They made peculiarly plaintive humming noises. They almost formed a lamp-lit ceiling over the cleared space. They did hide the stars. Staring upward, Huyghens could just barely make out the blue-white flame of the space-boat's rocket through the fog of wings and bodies.

The rocket-flame grew steadily in size. Once, .apparently, it tilted to adjust the boat's descending course. It went back to normal. A speck of incandescence at first, it grew until it was like a great star, and then a morethan-brilliant moon, and then it was a pitiless glaring eye. Huyghens averted his gaze from it. Sitka Pete sat lumpily—more than a ton of him— and blinked wisely at the dark jungle away from the light. Sourdough ignored the deepening, increasing rocket roar. He sniffed the air delicately. Faro Nell held Nugget firmly under one huge paw and licked his head as if tidying him up to be seen by company. Nugget wriggled.

The roar became that of ten thousand thunders. A warm breeze blew outward from the landing-field. The rocket boat hurled downward, and its flame touched the mist of flying things, and they shriveled and burned and were hot. Then there were churning clouds of dust everywhere, and the center of the field blazed terribly—and something slid down a shaft of fire, and squeezed it flat, and sat on it—and the flame went out. The rocket boat sat there, resting on its tail fins, pointing toward the stars from which it came.

There was a terrible silence after the tumult. Then, very faintly, the noises of the night came again. There were sounds like those of organ pipes, and very faint and apologetic noises like hiccups. All these sounds increased, and suddenly Huyghens could hear quite normally. Then a sideport opened with a quaint sort of clattering, and something unfolded from where it had been inset into the hull of the space boat, and there was a metal passageway across the flame-heated space on which the boat stood.

A man came out of the port. He reached back in and shook hands very formally. He climbed down the ladder rungs to the walkway. He marched above the steaming baked area, carrying a traveling bag. He reached the end of the walk and stepped gingerly to the ground. He moved hastily to the edge of the clearing. He waved to the space boat. There were ports. Perhaps someone returned the gesture. The walkway folded briskly back up to the hull and vanished in it. A flame exploded into being under the tail fins. There were fresh clouds of monstrous, choking dust and a brightness like that of a sun. There was noise past the possibility of endurance. Then the light rose swiftly through the dust cloud, and sprang higher and climbed more swiftly still. When Huyghens' ears again permitted him to hear anything, there was only a diminishing mutter in the heavens and a small bright speck of light ascending to the sky and swinging eastward as it rose to intercept the ship which had let it descend.

The night noises of the jungle went on. Life on Loren Two did not need to heed the doings of men. But there was a spot of incandescence in the day-bright clearing, and a short, brisk man looked puzzledly about him with a traveling bag in his hand.

Huyghens advanced toward him as the incandescence dimmed. Sourdough and Sitka preceded him. Faro Nell trailed faithfully, keeping a maternal eye on her offspring. The man in the clearing stared at the parade they made. It would be upsetting, even after preparation, to land at night on a strange planet, and to have the ship's boat and all links with the rest of the cosmos depart, and then to find one's self approached—it might seem stalked—by two colossal male Kodiak bears, with a third bear and cub behind them. A single human figure in such company might seem irrelevant.

The new arrival gazed blankly. He moved, startled. Then Huyghens called: "Hello, there! Don't worry about the bears! They're friends!"

Sitka reached the newcomer. He went warily downwind from him and sniffed. The smell was satisfactory. Man-smell. Sitka sat down with the solid impact of more than a ton of bear-meat landing on packed dirt. He regarded the man amiably. Sourdough said "Whoosh!" and went on to sample the air beyond the clearing. Huyghens approached. The newcomer wore the uniform of the Colonial Survey. That was bad. It bore the insignia of a senior officer. Worse.

"Hah!" said the just-landed man. "Where are the robots? What in all the nineteen hells are these creatures? Why did you shift your station? I'm Roane, here to make a progress report on your colony."

Huyghens said:

"What colony?"

"Loren Two Robot Installation—" Then Roane said indignantly, "Don't tell me that that idiot skipper dropped me at the wrong place! This is Loren Two, isn't it? And this is the landing field. But where are your robots? You should have the beginning of a grid up! What the devil's happened here and what are these beasts?"

Huyghens grimaced.

"This," he said politely, "is an illegal, unlicensed settlement. I'm a criminal. These beasts are my confederates. If you don't want to associate with criminals you needn't, of course, but I doubt if you'll live till morning unless you accept my hospitality while I think over what to do about your landing. In reason, I ought to shoot you."

Faro Nell came to a halt behind Huyghens, which was her proper post in all out-door movement. Nugget, however, saw a new human. Nugget was a cub, and, therefore, friendly. He ambled forward ingratiatingly. He was four feet high at the shoulders, on all fours. He wriggled bashfully as he approached Roane. He sneezed, because he was embarrassed.

His mother overtook him swiftly and cuffed him to one side. He wailed. The wail of a six-hundred-pound Kodiak bear-cub is a remarkable sound. Roane gave ground a pace.

"I think," he said carefully, "that we'd better talk things over. But if this is an illegal colony, of course you're under arrest and anything you say will be used against you."

Huyghens grimaced again.

"Right," he said. "But now if you'll walk close to me, we'll head back to the station. I'd have Sourdough carry your bag—he likes to carry things—but he may need his teeth. We've half a mile to travel." He turned to the animals. "Let's go!" he said commandingly. "Back to the station! Hup!"

Grunting, Sitka Pete arose and took up his duties as advanced point of a combat team. Sourdough trailed, swinging widely to one side and another. Huyghens and Roane moved together. Faro Nell and Nugget brought up the rear. Which, of course, was the only relatively safe way for anybody to travel on Loren Two, in the jungle, a good half mile from one's fortresslike residence.

But there was only one incident on the way back. It was a nightwalker, made hysterical by the lane of light. It poured through the underbrush, uttering cries like maniacal laughter.

Sourdough brought it down, a good ten yards from Huyghens. When it was all over, Nugget bristled up to the dead creature, uttering cubgrowls. He feigned to attack it.

His mother whacked him soundly.

## II

There were comfortable, settling-down noises below. The bears grunted and rumbled, but ultimately were still. The glare from the landing field was gone. The lighted lane through the jungle was dark again. Huyghens ushered the

man from the space boat up into his living quarters. There was a rustling stir, and Semper took his head from under his wing. He stared coldly at the two humans. He spread monstrous, seven-foot wings and fluttered them. He opened his beak and closed it with a snap.

"That's Semper," said Huyghens. "Semper Tyrannis. He's the rest of the terrestrial population here. Not being a fly-by-night sort of creature, he didn't come out to welcome you."

Roane blinked at the huge bird, perched on a three-inch-thick perch set in the wall.

"An eagle?" he demanded. "Kodiak bears—mutated ones you say, but still bears—and now an eagle? You've a very nice fighting unit in the bears."

"They're pack animals, too," said Huyghens. "They can carry some hundreds of pounds without losing too much combat efficiency. And there's no problem of supply. They live off the jungle. Not sphexes, though. Nothing will eat a sphex, even if it can kill one."

He brought out glasses and a bottle. He indicated a chair. Roane put down his traveling bag. He took a glass.

"I'm curious," he observed. "Why Semper Tyrannis? I can understand Sitka Pete and Sourdough Charley as names. The home of their ancestors makes them fitting. But why Semper?"

"He was bred for hawking," said Huyghens. "You sic a dog on something. You sic Semper Tyrannis. He's too big to ride on a hawking glove, so the shoulders of my coats are padded to let him ride there. He's a flying scout. I've trained him to notify us of sphexes, and in flight he carries a tiny television camera. He's useful, but he hasn't the brains of the bears."

Roane sat down and sipped at his glass.

"Interesting . . . very interesting! But this is an illegal settlement. I'm a Colonial Survey officer. My job is reporting on progress according to plan, but nevertheless I have to arrest you. Didn't you say something about shooting me?"

Huyghens said doggedly:

"I'm trying to think of a way out. Add up all the penalties for illegal colonization and I'd be in a very bad fix if you got away and reported this set-up. Shooting you would be logical."

"I see that," said Roane reasonably. "But since the point has come up—I have a blaster trained on you from my pocket."

Huyghens shrugged.

"It's rather likely that my human confederates will be back here before your friends. You'd be in a very tight fix if my friends came back and found you more or less sitting on my corpse."

Roane nodded.

"That's true, too. Also it's probable that your fellow terrestrials wouldn't co-operate with me as they have with you. You seem to have the whip hand, even with my blaster trained on you. On the other hand, you could have killed me quite easily after the boat left, when I'd first landed. I'd have been quite unsuspecting. So you may not really intend to murder me."

Huyghens shrugged again.

"So," said Roane, "since the secret of getting along with people is that of postponing quarrels—suppose we postpone the question of who kills whom? Frankly, I'm going to send you to prison if I can. Unlawful colonization is very bad business. But I suppose you feel that you have to do something permanent about me. In your place I probably should, too. Shall we declare a truce?"

Huyghens indicated indifference. Roane said vexedly:

"Then I do! I have to! So—"

He pulled his hand out of his pocket and put a pocket blaster on the table. He leaned back, defiantly.

"Keep it," said Huyghens. "Loren Two isn't a place where you live long unarmed." He turned to a cupboard. "Hungry?"

"I could eat," admitted Roane.

Huyghens pulled out two mealpacks from the cupboard and inserted them in the reader below. He set out plates.

"Now-what happened to the official, licensed, authorized colony here?" asked Roane briskly. "License issued eighteen months ago. There was a landing of colonists with a drone fleet of equipment and supplies. There've been four ship-contacts since. There should be several thousand robots being industrious under adequate humad supervision. There should be a hundred-mile-square clearing, planted with food plants for later human arrivals. There should be a landing grid at least half-finished. Obviously there should be a space beacon to guide ships to a landing. There isn't. There's no clearing visible from space. That Crete Line ship has been in orbit for three days, trying to find a place to drop me. Her skipper was fuming.. Your beacon is the only one on the planet, and we found it by accident. What happened?"

Huyghens served the food. He said dryly:

"There could be a hundred colonies on this planet without any one knowing of any other. I can only guess about your robots, but I suspect they ran into sphexes."

Roane paused, with his fork in his hand.

"I read up on this planet, since I was to report on its colony. A sphex is part of the inimical animal life here. Cold-blooded belligerent carnivore, not a lizard but a genus all its own. Hunts in packs. Seven to eight hundred pounds, when adult. Lethally dangerous and simply too numerous to fight. They're why no license was ever granted to human colonists. Only robots could work here, because they're machines. What animal attacks machines?"

Huyghens said:

"What machine attacks animals? The sphexes wouldn't bother robots, of course, but would robots bother the sphexes?"

Roane chewed and swallowed.

"Hold it! I'll agree that you can't make a hunting-robot. A machine can discriminate, but it can't decide. That's why there's no danger of a robot revolt. They can't decide to do something for which they have no instructions. But this colony was planned with full knowledge of what robots can and can't do. As 'ground was cleared, it was enclosed in an electric fence which no sphex could touch without frying."

Huyghens thoughtfully cut his food. After a moment:

'The landing was in the wintertime," he observed. "It must have been, because the colony survived a while. And at a guess, the last shiplanding was before thaw. The years are eighteen months long here, you know."

Roane admitted:

"It was in winter that the landing was made. And the last ship-landing was before spring. The idea was to get mines in operation for material, and to have ground cleared and enclosed in sphex-proof fence before the sphexes came back from the tropics. They winter there, I understand."

"Did you ever see a sphex?" Huyghens asked. Then added, "No, of course not. But if you took a spitting cobra and crossed it with a wildcat, painted it tan-and-blue and then gave it hydrophobia and homicidal mania at once-why you might have one sphex. But not the race of sphexes. They can climb trees, by the way. A fence wouldn't stop them."

"An electrified fence," said Roane. "Nothing could climb that!"

"No one animal," Huyghens told him. "But sphexes are a race. The smell of one dead sphex brings others running with blood in their eyes. Leave a dead sphex alone for six hours and you've got them around by the dozen. Two days and there are hundreds. Longer, and you've got thousands of them! They gather to caterwaul over their dead pal and hunt for whoever or whatever killed him."

He returned to his meal. A moment later he said:

"No need to wonder what happened to your colony. During the winter the robots burned out a clearing and put up an electrified fence according to the book. Come spring, the sphexes came back. They're curious, among their other madnesses. A sphex would try to climb the fence just to see what was behind



it. He'd be electrocuted. His carcass would bring others, raging because a sphex was dead. Some of them would try to climb the fence—and die. And their corpses would bring others. Presently the fence would break down from the bodies hanging on it, or a bridge of dead beasts' carcasses would be built across it—and from as far downwind as the scent carried there'd be loping, raging, scent-crazed sphexes racing to the spot. They'd pour into the clearing through or over the fence, squalling and screeching for something to kill. I think they'd find it."

Roane ceased to eat. He looked sick.

"There were. . . pictures of sphexes in the data I read. I suppose that would account for. . . everything."

He tried to lift his fork. He put it down again.

"I can't eat," he said abruptly.

Huyghens made no comment. He finished his own meal, scowling. He rose and put the plates into the top of the cleaner. There was a whirring. He took them out of the bottom and put them away.

"Let me see those reports, eh?" he asked dourly. "I'd like to see what sort of a set-up they had—those robots."

Roane hesitated and then opened his traveling bag. There was a microviewer and reels of films. One entire reel was labeled "Specifications for Construction, Colonial Survey:" which would contain detailed plans and all requirements of material and workmanship for everything from desks, office, administrative personnel, for use of, to landing grids, heavy-gravity planets, lift-capacity one hundred thousand Earth-tons. But Huyghens found another. He inserted it and spun the control swiftly here and there, pausing only briefly at index frames until he came to the section he wanted. He began to study the information with growing impatience.

"Robots, robots, robots!" he snapped. "Why don't they leave them where they belong—in cities to do the dirty work, and on airless planets where nothing unexpected ever happens! Robots don't belong in new colonies! Your colonists depended on them for defense! Dammit, let a man work with robots long enough and he thinks all nature is as limited as they are! This is a plan to set up a controlled environment! On Loren Two! Controlled environment—" He swore, luridly. "Complacent, idiotic, desk-bound half-wits!"

"Robots are all right," said Roane. "We couldn't run civilization without them."

"But you can't tame a wilderness with 'em!" snapped Huyghens. "You had a dozen men landed, with fifty assembled robots to start with. There were parts for fifteen hundred more—and I'll bet anything I've got that the ship-contacts landed more still."

"They did' admitted Roane.

"I despise 'em," growled Huyghens. "I feel about 'em the way the old Greeks and Romans felt about slaves. They're for menial work—the sort of work a man will perform for himself, but that he won't do for another man for pay. Degrading work!"

"Quite aristocratic!" said Roane with a touch of irony. "I take it that robots clean out the bear quarters downstairs."

"No!" snapped Huyghens. "I do! They're my friends! They fight for me! They can't understand the necessity and no robot would do the job right!"

He growled, again. The noises of the night went on outside. Organ tones and hiccupings and the sound of tack hammers and slamming doors. Somewhere there was a singularly exact replica of the discordant squeaking of a rusty pump.

"I'm looking," said Huyghens at the micro-viewer, "for the record of their mining operations. An open-pit operation wouldn't mean a thing. But if they had driven a tunnel, and somebody was there supervising the robots when the colony was wiped out, there's an off-chance he survived a while."

Roane regarded him with suddenly intent eyes.

"And—"

"Dammit," snapped Huyghens, "if so I'll go see! He'd ... they'd have no chance at all, otherwise. Not that the chance is good in any case!"

Roane raised his eyebrows.

"I'm a Colonial Survey officer," he said. "I've told you I'll send you to prison if I can. You've risked the lives of millions of people, maintaining non-quarantined communication with an unlicensed planet. If you did rescue somebody from the ruins of the robot colony, does it occur to you that they'd be witnesses to your unauthorized presence here?"

Huyghens spun the viewer again. He stopped. He switched back and forth and found what he wanted. He muttered in satisfaction: "They did run a tunnel!" Aloud he said, "I'll worry about witnesses when I have to."

He pushed aside another cupboard door. Inside it were the odds and ends a man makes use of to repair the things about his house that he never notices until they go wrong. There was an assortment of wires, transistors, bolts, and similar stray items that a man living alone will need. When to his knowledge he's the only inhabitant of a solar system, he especially needs such things.

"What now?" asked Roane mildly.

"I'm going to try to find out if there's anybody left alive over there. I'd have checked before if I'd known the colony existed. I can't prove they're all dead, but I may prove that somebody's still alive. It's barely two weeks' journey away from here! Odd that two colonies picked spots so near!"

He absorbedly picked over the oddments he'd selected. Roane said vexedly:

"Confound it! How can you check whether somebody's alive some hundreds of miles away—when you didn't know he existed half an hour ago?"

Huyghens threw a switch and took down a wall panel, exposing electronic apparatus and circuits behind. He busied himself with it.

"Ever think about hunting for a castaway?" he asked over his shoulder. "There's a planet with some tens of millions of square miles on it. You know there's a ship down. You've no idea where. You assume the survivors have power—no civilized man will be without power very long, so long as he can smelt metals !—but making a space beacon calls for highprecision measurements and workmanship. It's not to be improvised. So what will your ship-wrecked civilized man do, to guide a rescue ship to the one or two square miles he occupies among some tens of millions on the planet?"

Roane fretted visibly.

"What?"

"He's had to go primitive, to begin with," Roane explained. "He cooks his meat over a fire, and so on. He has to make a strictly primitive signal. It's all he can do without gauges and micrometers and very special tools. But he can fill all the planet's atmosphere with a signal that searchers for him can't miss. You see?"

Roane thought irritably. He shook his head.

"He'll make," said Huyghens, "a spark transmitter. He'll fix its output at the shortest frequency he can contrive—it'll be somewhere in the five-to-fifty-meter wave-band, but it will tune very broad—and it will be a plainly human signal. He'll start it broadcasting. Some of those frequencies will go all around the planet under the ionosphere. Any ship that comes in under the radio roof will pick up his signal, get a fix on it, move and get another fix, and then go straight to where the castaway is waiting placidly in a hand-braided hammock, sipping whatever sort of drink he's improvised out of the local vegetation."

Roane said grudgingly:

"Now that you mention it, of course—"

"My space phone picks up microwaves," said Huyghens, "I'm shifting a few elements to make it listen for longer stuff. It won't be efficient, but it will pick up a distress signal if one's in the air. I don't expect it, though."

He worked. Roane sat still a long time, watching him. Down below, a rhythmic sort of sound arose. It was Sourdough Charley, snoring. He lay on his back with his legs in the air. He'd discovered that he slept cooler that way. Sitka Peter grunted in his sleep. He was dreaming. In the general room of the station Semper, the eagle, blinked his eyes rapidly and then tucked his head under a gigantic wing and went to sleep. The noises of the Loren Two jungle came through the steel-shuttered windows. The nearer moon—which had passed overhead not long before the ringing of the arrival bell—again came soaring over the eastern horizon. It sped across the sky at the apparent speed of an atmosphere-flier. Overhead, it could be seen to be a jagged irregular mass of rock or metal, plunging blindly about the great planet forever.

Inside the station, Roane said angrily:

"See here, Huyghens! You've reason to kill me. Apparently you don't intend to. You've excellent reason to leave that robot colony strictly alone. But you're preparing to help, if there's anybody alive to need it. And yet you're a criminal—and I mean a criminal! There've been some ghastly bacteria exported from planets like Loren Two! There've been plenty of lives lost in consequence, and you're risking more! Why do you do it? Why do you do something that could produce monstrous results to other beings?"

Huyghens grunted.

"You're only assuming there are no sanitary and quarantine precautions taken in my communications. As a matter of fact, there are. They're taken, all right! As for the rest, you wouldn't understand."

"I don't understand," snapped Roane, "but that's no proof I can't! Why are you a criminal?"

Huyghens painstakingly used a screwdriver inside the wall panel. He delicately lifted out a small electronic assembly. He carefully began to fit in a spaghettied new assembly with larger units.

"I'm cutting my amplification here to hell-and-gone," he observed, "but I think it'll do. I'm doing what I'm doing," he added calmly, "I'm being a criminal because it seems to me befitting what I think I am. Everybody acts according to his own real notion of himself. You're a conscientious citizen, and a loyal official, and a well-adjusted personality. You consider yourself an intelligent rational animal. But you don't act that way! You're reminding me of my need to shoot you or something similar, which a merely rational animal would try to make me forget. You happen, Roane, to be a man. So am I. But I'm aware of it. Therefore, I deliberately do things a merely rational animal wouldn't, because they're my notion of what a man who's more than a rational animal should do."

He very carefully tightened one small screw after another. Roane said annoyedly:

"Oh. Religion."

"Self-respect," corrected Huyghens. "I don't like robots. They're too much like rational animals. A robot will do whatever it can that its supervisor requires it to do. A merely rational animal will do whatever it can that circumstances require it to do. I wouldn't like a robot unless it had some idea of what was befitting it and would sptt in my eye if I tried to make it do something else. The bears downstairs, now— They're no robots! They are loyal and honorable beasts, but they'd turn and tear me to bits if I tried to make them do something against their nature. Faro Nell would fight me and all creation together, if I tried to hann Nugget. It would be unintelligent and unreasonable and irrational. She'd lose out and get killed. But I like her that way! And I'll fight you and all creation when you make me try to do something against my nature. I'll be stupid and unreasonable and irrational about it." Then he grinned over his shoulder. "So will you. Only you don't realize it."

He turned back to his task. After a moment he fitted a manual-control knob over a shaft in his haywire assembly.

"What did somebody try to make you do?" asked Roane shrewdly. "What was demanded of you that turned you into a criminal? What are you in revolt against?"

Huyghens threw a switch. He began to turn the knob which controlled the knob of his makeshift-modified receiver.

"Why:" he said amusedly, "when I was young the people around me tried to make me into a conscientious citizen and a loyal employee and a well-adjusted personality. They tried to make me into a highly intelligent rational animal and nothing more. The difference between us, Roane, is that I found it out. naturally, I rev--"

He stopped short. Faint, crackling, crisp frying sounds came from the speaker of the space phone now modified to receive what once were called short waves.

Huyghens listened. He cocked his head intently. He turned the knob very, very slowly. Then Roane made an arrested gesture, to call attention to something in the sibilant sound. Huyghens nodded. He turned the knob again, with infinitesimal increments.

Out of the background noise came a patterned mutter. As Huyghens shifted the tuning, it grew louder. It reached a volume where it was unmistakable. It was a sequence of sounds like discordant buzzing. There were three half-second buzzings with half-second pauses between. A two-second pause. Three full-second buzzings with half-second pauses between. Another two-second pause and three half-second buzzings, again. Then silence for five seconds. Then the pattern repeated.

"The devil !" said Huyghens. "That's a human signal! Mechanically made, too! In fact, it used to be a standard distress-call. It was termed an 5 0 S, though I've no idea what that meant. Anyhow, somebody must have read old-fashioned novels, some time, to know about it. And so someone is still alive over at your licensed, but now smashed-up, robot colony. And they're asking for help. I'd say they're likely to need it."

He looked at Roane.

"The intelligent thing to do is sit back and wait for a ship--either of my friends or yours. A ship can help survivors or castaways much better than we can. A ship can even find them more easily. But maybe time is important to the poor devils! So I'm going to take the bears and see if I can reach them. You can wait here, if you like. What say? Travel on Loren Two isn't a picnic! I'll be fighting nearly every foot of the way. There's plenty of 'inimical animal life' here!"

Roane snapped angrily:

"Don't be a fool! Of course I'm coming! What do you take me for? And two of us should have four times the chance of one!"

Huyghens grinned.

"Not quite. You forget Sitka Pete and Sourdough Charley and Faro Nell. There'll be five of us if you come, instead of four. And, of course, Nugget has to come--and he'll be no help--but Semper may make up for him. You won't quadruple our chances, Roane, but I'll be glad to have you if you want to be stupid and unreasonable and not at all rational-- and come along."

### III

There was a jagged spur of stone looming precipitously over a river valley. A thousand feet below, a broad stream ran westward to the sea. Twenty miles to the east, a wall of mountains rose sheer against the sky. Its peaks seemed to blend to a remarkable evenness of height. There was rolling, tumbled ground between for as far as the eye could see.

A speck in the sky came swiftly downward. Great pinions spread, and flapped, and icy eyes surveyed the rocky space. With more great flappings, Semper the eagle came to ground. He folded his huge wings and turned his head

jerkily, his eyes unblinking. A tiny harness held a miniature camera against his chest. He strutted over the bare stone to the highest point. He stood there, a lonely and arrogant figure in the vastness.

There came crashings and rustlings, and then snuffling sounds. Sitka Pete came lumbering out into the clear space. He wore a harness too, and a pack. The harness was complex, because it had not only to hold a pack in normal travel, but, when he stood on his hind legs, it must not hamper the use of his forepaws in combat.

He went cagily all over the open area. He peered over the edge of the spur's farthest tip. He prowled to the other side and looked down. He scouted carefully. Once he moved close to Semper and the eagle opened his great curved beak and uttered an indignant noise. Sitka paid no attention.

He relaxed, satisfied. He sat down untidily, his hind legs sprawling. He wore an air approaching benevolence as he surveyed the landscape about and below him.

More snufflings and crashings. Sourdough Charley came into view with Huyghens and Roane behind him. Sourdough carried a pack, too. Then there was a squealing and Nugget scurried up from the rear, impelled by a whack from his mother. Faro Nell appeared, with the carcass of a staglike animal lashed to her harness.

"I picked this place from a space photo," said Huyghens, "to make a directional fix from. I'll get set up."

He swung his pack from his shoulders to the ground. He extracted an obviously self-constructed device which he set on the ground. It had a whip aerial, which he extended. Then he plugged in a considerable length of flexible wire and unfolded a tiny, improvised directional aerial with an even tinier booster at its base. Roane slipped his pack from his shoulders and watched. Huyghens slipped headphones over his ears. He looked up and said sharply:

"Watch the bears, Roane. The wind's blowing up the way we came. Anything that trails us—sphexes, for example—will send its scent on before. The bears will tell us."

He busied himself with the instruments he'd brought. He heard the hissing, frying, background noise which could be anything at all except a human signal. He reached out and swung the small aerial around. Rasping, buzzing tones came in, faintly and then loudly. This receiver, though, had been made for this particular wave band. It was much more efficient than the modified space phone had been. It picked up three short buzzes, three long ones, and three short ones again. Three dots, three dashes, and three dots. Over and over again. S 0 5. 5 0 S. S 0 S.

Huyghens took a reading and moved the directional aerial a carefully measured distance. He took another reading. He shifted it yet again and again, carefully marking and measuring each spot and taking notes of the instrument readings. When he finished, he had checked the direction of the signal not only by loudness but by phase—he had as accurate a fix as could possibly be had with portable apparatus.

Sourdough growled softly. Sitka Pete whiffed the air and arose from his sitting position. Faro Nell whacked Nugget, sending him whimpering to the farthest corner of the flea place. She stood bristling, facing downhill the way they'd come.

"Damn!" said Huyghens.

He got up and waved his arm at Semper, who had turned his head at the stirrings. Semper squawked in a most un-eaglelike fashion and dived off the spur and was immediately fighting the down-draught beyond it. As Huyghens reached his weapon, the eagle came back overhead. He went magnificently past, a hundred feet high, careening and flapping in the tricky currents. He screamed, abruptly, and circled and screamed again. Huyghens swung a tiny vision plate from its strap to where he could look into it. He saw, of course, what the little camera on Semper's chest could see—reeling, swaying terrain as

Semper saw it, though without his breadth of field. There were moving objects to be seen through the shifting trees. Their coloring was unmistakable.

"Sphexes," said Huyghens dourly. "Eight of them. Don't look for them to follow our track, Roane. They run parallel to a trail on either side. That way they attack in breadth and all at once when they catch up. And listen! The bears can handle anything they tangle with! It's our job to pick off the loose ones! And aim for the body! The bullets explode."

He threw off the safety of his weapon. Faro Nell, uttering thunderous growls, went padding to a place between Sitka Pete and Sourdough. Sitka glanced at her and made a whuffing noise, as if derisive of her bloodcurdling sounds. Sourdough grunted in a somehow solid fashion. He and Sitka moved farther away from Nell to either side. They would cover a wider front.

There was no other sign of life than the shrillings of the incredibly tiny creatures which on this planet were birds, and Faro Nell's deep-bass, raging growls, and then the click of Roane's safety going off as he got ready to use the weapon Huyghens had given him.

Semper screamed again, flapping low above the treetops, following parti-colored, monstrous shapes beneath.

Eight blue-and-tan fiends came racing out of the underbrush. They had spiny fringes, and horns, and glaring eyes, and they looked as if they had come straight out of hell. On the instant of their appearance they leaped, emitting squalling, spitting squeals that were like the cries of fighting tomcats ten thousand times magnified. Huyghens' rifle cracked, and its sound was wiped out in the louder detonation of its bullet in sphexian flesh. A tan-and-blue monster tumbled over, shrieking. Faro Nell charged, the very impersonation of white-hot fury. Roane fired, and his bullet exploded against a tree. Sitka Pete brought his massive forepaws in a clapping, monstrous ear-boxing motion. A sphex died.

Then Roane fired again. Sourdough Charley whuffed. He fell forward upon a spitting bi-colored fiend, rolled him over, and raked with his hind claws. The belly-hide of the sphex was tenderer than the rest. The creature rolled away, snapping at its own wounds. Another sphex found itself shaken loose from the tumult about Sitka Pete. It whirled to leap on him from behind—and Huyghens fired very coldly—and two plunged upon Faro Nell and Roane blasted one and Faro Nell disposed of the other in truly awesome fury. Then Sitka Pete heaved himself erect—seeming to drip sphexes—and Sourdough waddled over and pulled one off and killed it and went back for another. And both rifles cracked together and there was suddenly nothing left to fight.

The bears prowled from one to another of the corpses. Sitka Pete rumbled and lifted up a limp head. Crash! Then another. He went over the lot, whether or not they showed signs of life. When he had finished, they were wholly still.

Semper came flapping down out of the sky. He had screamed and fluttered overhead as the fight went on. Now he landed with a rush. Huyghens went soothingly from one bear to another, calming them with his voice. It took longest to calm Faro Nell, licking Nugget with impassioned solicitude and growling horribly as she licked.

"Come along, now," said Huyghens, when Sitka showed signs of intending to sit down again. "Heave these carcasses over a cliff. Come along! Sitka! Sourdough! Hup!"

He guided them as the two big males somewhat fastidiously lifted up the nightmarish creatures they and the guns together had killed, and carried them to the edge of the spur of stone. They let the dead beasts go bouncing and sliding down into the valley.

"That," said Huyghens, "is so their little pals will gather round them and caterwaul their woe where there's no trail of ours to give them ideas. If we'd been near a river, I'd have dumped them in to float downriver and gather mourners wherever they stranded. Around the station I incinerate them. If I had to leave them, I'd make tracks away. About fifty miles upwind would be a good idea."

He opened the pack Sourdough carried and extracted giant sized swabs and some gallons of antiseptic. He tended the three Kodiaks in turn, swabbing not only the cuts and scratches they'd received, but deeply soaking their fur where there could be suspicion of spilled sphex blood.

"This antiseptic deodorizes, too," he told Roane. "Or we'd be trailed by any sphex who passed to leeward of us. When we start off, I'll swab the bears' paws for the same reason."

Roane was very quiet. He'd missed his first shot with a bullet-firing weapon—a beam hasn't the stopping-power of an explosive bullet—but he'd seemed to grow savagely angry with himself. The last few seconds of the fight, he'd fired very deliberately and every bullet hit. Now he said bitterly:

"If you're instructing me so I can carry on should you be killed, I doubt that it's worth while!"

Huyghens felt in his pack and unfolded the enlargements he'd made of the space photos of this part of the planet. He carefully oriented the map with distant landmarks. He drew a painstakingly accurate line across the photo.

"The S O S signal comes from somewhere close to the robot colony," he reported. "I think a little to the south of it. Probably from a mine they'd opened up, on the far side—of course—of the Sere Plateau. See how I've marked this map? Two fixes, one from the station and one from here. I came away off-course to get a fix here so we'd have two position-lines to the transmitter. The signal could have come from the other side of the planet. But it doesn't."

"The odds would be astronomical against other castaways," protested Roane.

"No-o-o-o," said Huyghens. "Ships have been coming here. To the robot-colony. One could have crashed. And I have friends, too."

He repacked his apparatus and gestured to the bears. He led them beyond the scene of combat and very carefully swabbed off their paws, so they could not possibly leave a trail of sphex-blood scent behind them. He waved Semper, the eagle, aloft.

"Let's go," he told the Kodiaks. "Yonder! Hup!"

The party headed downhill and into the jungle again. Now it was Sourdough's turn to take the lead, and Sitka Pete prowled more widely behind him. Faro Nell trailed the men, with Nugget. She kept an extremely sharp eye upon the cub. He was a baby, still. He only weighed six hundred pounds. And of course she watched against danger from the rear.

Overhead, Semper fluttered and flew in giant circles and spirals, never going very far away. Huyghens referred constantly to the screen which showed what the air-borne camera saw. The image tilted and circled and banked and swayed. It was by no means the best airreconnaissance that could be imagined. But it was the best that would work. Presently Huyghens said:

"We swing to the right, here. The going's bad straight ahead, and it looks like a pack of sphexes has killed and is feeding."

Roane was upset. He was dissatisfied with himself. So he said:

"It's against reason for carnivores to be as thick as you say! There has to be a certain amount of other animal life for every meat-eating beast! Too many of them would eat all the game and starve!"

"They're gone all winter," explained Huyghens, "which around here isn't as severe as you might think. And a good many animals seem to breed just after the sphexes go south. Also, the sphexes aren't around all the warm weather. There's a sort of peak, and then for a matter of weeks you won't see a one of them, and suddenly the jui-gle swarms with them again. Then, presently, they head south. Apparently they're migratory in some fashion, but nobody knows." He said dryly: "There haven't been many naturalists around on this planet. The animal life is inimical."

Roane fretted. He was a senior officer in the Colonial Survey, and he was accustomed to arrival at a partly or completely-finished colonial setup, and to pass upon the completion or non-completion of the planned installation

as designed. Now he was in an intolerably hostile environment, depending upon an illegal colonist for his life, engaged upon a demoralizingly indefinite enterprise—because the mechanical spark-signal could be working long after its constructors were dead—and his ideas about a number of matters were shaken. He was alive, for example, because of three giant Kodiak bears and a bald eagle. He and Huyghens could have been surrounded by ten thousand robots, and they'd have been killed. Sphexes and robots would have ignored each other, and sphexes would have made straight for the men, who'd have had less than four seconds in which to discover for themselves that they were attacked, prepare to defend themselves, and kill eight sphexes.

Roane's convictions as a civilized man were shaken. Robots were marvelous contrivances for doing the expected: accomplishing the planned; coping with the predicted. But they also had defects. Robots could only follow instructions—if this thing happens, do this, if that thing happens do that. But before something else, neither this nor that, robots were helpless. So a robot civilization worked only in an environment where nothing unanticipated ever turned up, and human supervisors never demanded anything unexpected. Roane was appalled. He'd never encountered the truly unpredictable before in all his life and career.

He found Nugget, the cub, ambling uneasily in his wake. The cub flattened his ears miserably when Roane glanced at him. It occurred to the man that Nugget was receiving a lot of disciplinary thumpings from Faro Nell. He was knocked about physically, pretty much as Roane was being knocked about psychologically. His lack of information and unfitness for independent survival in this environment was being hammered into him.

"Hi, Nugget," said Roane ruefully. "I feel just about the way you do!"

Nugget brightened visibly. He frisked. He tended to gambol. He looked very hopefully up into Roane's face—and he stood four feet high at the shoulder and would overtop Roane if he stood erect.

Roane reached out and patted Nugget's head. It was the first time in all his life that he'd ever petted an animal.

He heard a snuffling sound behind him. Skin crawled at the back of his neck. He whirled.

Faro Nell regarded him—eighteen hundred pounds of she-bear only ten feet away and looking into his eyes. For one panicky instant Roane went cold all over. Then he realized that Faro Nell's eyes were not burning. She was not snarling. She did not emit those blood-curdling sounds which the bare prospect of danger to Nugget had produced up on the rocky spur. She looked at him blandly. In fact, after a moment she swung off on some independent investigation of a matter that had aroused her curiosity.

The traveling party went on, Nugget frisking beside Roane and tending to bump into him out of pure cub-clumsiness. Now and again he looked adoringly at Roane, in the instant and overwhelming affection of the very young.

Roane trudged on. Presently he glanced behind again. Faro Nell was now ranging more widely. She was well satisfied to have Nugget in the immediate care of a man. From time to time he got on her nerves.

A little while later, Roane called ahead.

"Huyghens! Look here! I've been appointed nursemaid to Nugget!" Huyghens looked back.

"Oh, slap him a few times and he'll go back to his mother."

"The devil I will!" said Roane querulously. "I like it!"

The traveling party went on.

When night fell, they camped. There could be no fire, of course, because all the minute night-things about would come eagerly to dance in the glow. But there could not be darkness, equally, because night-walkers hunted in the dark. So Huyghens set out the barrier lamps which made a wall of twilight about their halting place, and the staglike creature Faro Nell had carried became their evening meal. Then they slept—at least the men did—and the bears dozed and snorted and waked and dozed again. But Semper sat immobile with his



head under his wing on a tree limb. And presently there was a glorious cool hush and all the world glowed in morning light diffused through the jungle by a newly risen sun. And they arose, and traveled again.

This day they stopped stock-still for two hours while sphexes puzzled over the trail the bears had left. Huyghens discoursed calmly on the need for an anti-scent, to be used on the boots of men and the paws of bears, which would make the following of their trails unpopular with sphexes. And Roane seized upon the idea and absorbedly suggested that a sphexrepellent odor might be worked out, which would make a human revolt-  
ing to a sphex. If that were done-why-humans could go freely about unmolested.

"Like stink-bugs," said Huyghens, sardonically. "A very intelligent idea! Very rational! You can feel proud!"

And suddenly Roane, very obscurely, was not proud of the idea at all. They camped again. On the third night they were at the base of that remarkable formation, the Sere Plateau, which from a distance looked like a mountain-range but was actually a desert tableland. And it was not reasonable for a desert to be raised high, while lowlands had rain, but on the fourth morning they found out why. They saw, far, far away, a truly monstrous mountain-mass at the end of the long-way expanse of the plateau. It was like the prow of a ship. It lay, so Huyghens observed, directly in line with the prevailing winds, and divided them as a ship's prow divides the waters. The moisture-bearing air-currents flowed beside the plateau, not over it, and its interior was pure sere desert in the unscreened sunshine of high altitudes.

It took them a full day to get halfway up the slope. And here, twice as they climbed, Semper flew screaming over aggregations of sphexes to one side of them or the other. These were much larger groups than Huyghens had ever seen before-fifty to a hundred monstrosities together, where a dozen was a large hunting-pack elsewhere. He looked in the screen which showed him what Semper saw, four to five miles away. The sphexes padded uphill toward the Sere Plateau in a long line. Fifty- sixty-seventy tan-and-azure beasts out of hell.

"I'd hate to have that bunch jump us," he said candidly to Roane. "I don't think we'd stand a chance."

"Here's where a robot tank would be useful," Roane observed.

"Anything armored," conceded Huyghens. "One man in an armored station like mine would be safe. But if he killed a sphex he'd be besieged. He'd have to stay holed up, breathing the smell of dead sphex, until the odor had gone away. And he mustn't kill any others or he'd be besieged until winter came."

Roane did not suggest the advantages of robots in other directions. At that moment, for example, they were working their way up a slope which averaged fifty degrees. The bears climbed without effort despite their burdens. For the men it was infinite toil. Semper, the eagle, manifested impatience with bears and men alike, who crawled so slowly up an incline over which he soared.

He went ahead up the mountainside and teetered in the air-currents at the plateau's edge. Huyghens looked in the visionplate by which he reported.

"How the devil:" panted Roane-they had stopped for a breather, and the bears waited patiently for them-"do you train bears like these? I can understand Semper."

"I don't train them:" said Huyghens, staring into the plate. 'They're mutations. In heredity the sex-linkage of physical characteristics is standard stuff. But there's been some sound work done on the gene-linkage of psychological factors. There was need, on my home planet, for an animal who could fight like a fiend, live off the land, carry a pack and get along with men at least as well as dogs do. In the old days they'd have tried to breed the desired physical properties into an animal who already had the personality they wanted. Something like a giant dog, say. But back home they went at it the other way about. They picked the wanted physical characteristics and bred for the personality-the psychology. The job got done over a century ago-a Kodiak bear named Kodius Champion was the first real success. He had

everything that was wanted. These bears are his descendants."

"They look normal," commented Roane.

"They are!" said Huyghens warmly. "Just as normal as an honest dog! They're not trained, like Semper. They train themselves!" He looked back into the plate in his hands, which showed the ground five and six and seven thousand feet higher. "Semper, now, is a trained bird without too much brains. He's educated—a glorified hawk. But the bears want to get along with men. They're emotionally dependent on us! Like dogs. Semper's a servant, but they're companions and friends. He's trained, but they're loyal. He's conditioned. They love us. He'd abandon me if he ever realized he could—he thinks he can only eat what men feed him. But the bears wouldn't want to. They like us. I admit that I like them. Maybe because they like me."

Roane said deliberately:

"Aren't you a trifle loose-tongued, Huyghens? I'm a Colonial Survey officer. I have to arrest you sooner or later. You've told me something that will locate and convict the people who set you up here. It shouldn't be hard to find where bears were bred for psychological mutations, and where a bear named Kodius Champion left descendants! I can find out where you came from now, Huyghens!"

Huyghens looked up from the plate with its tiny swaying television image, relayed from where Semper floated impatiently in mid-air.

"No harm done," he said amiably. "I'm a criminal there, too. It's officially on record that I kidnapped these bears and escaped with them. Which, on my home planet, is about as heinous a crime as a man can commit. It's worse than horse-theft back on Earth in the old days. The kin and cousins of my bears are highly thought of. I'm quite a criminal, back home."

Roane stared.

"Did you steal them?" he demanded.

"Confidentially," said Huyghens, "no. But prove it!" Then he said:

"Take a look in this plate. See what Semper can see up at the plateau's edge."

Roane squinted aloft, where the eagle flew in great sweeps and dashes. Somehow, by the experience of the past few days, Roane knew that Semper was screaming fiercely as he flew. He made a dart toward the plateau's border.

Roane looked at the transmitter picture. It was only four inches by six, but it was perfectly without grain and in accurate color. It moved and turned as the camera-bearing eagle swooped and circled. For an instant the screen showed the steeply sloping mountainside, and off at one edge the party of men and bears could be seen as dots. Then it swept away and showed the top of the plateau.

There were sphexes. A pack of two hundred trotted toward the desert interior. They moved at leisure, in the open. The viewing camera reeled, and there were more. As Roane watched and as the bird flew higher, he could see still other sphexes moving up over the edge of the plateau from a small erosion-defile here and another one there. The Sere Plateau was alive with the hellish creatures. It was inconceivable that there should be game enough for them to live on. They were visible as herds of cattle would be visible on grazing planets.

It was simply impossible.

"Migrating," observed Huyghens. "I said they did. They're headed somewhere. Do you know, I doubt that it would be healthy for us to try to cross the plateau through such a swarm of sphexes?"

Roane swore, in abrupt change of mood.

"But the signal's still coming through! Somebody's alive over at the robot colony! Must we wait till the migration's over?"

"We don't know," Huyghens pointed out, "that they'll stay alive. They may need help badly. We have to get to them. But at the same time—"

He glanced at Sourdough Charley and Sitka Pete, clinging patiently to the mountainside while the men rested and talked. Sitka had managed to find a

place to sit down, though one massive paw anchored him in his place.

Huyghens waved his arm, pointing in a new direction.

"Let's go!" he called briskly. "Let's go! Yonder! Hup!"

IV

They followed the slopes of the Sere Plateau, neither ascending to its level top—where sphexes congregated—nor descending into the foothills where sphexes assembled. They moved along hillsides and mountainflanks which sloped anywhere from thirty to sixty degrees, and they did not cover much distance. They practically forgot what it was to walk on level ground. Semper, the eagle, hovered overhead during the daytime, not far away. He descended at nightfall for his food from the pack of one of the bears.

"The bears aren't doing too well for food," said Huyghens dryly. "A ton of bear needs a lot to eat. But they're loyal to us. Semper hasn't any loyalty. He's too stupid. But he's been conditioned to think that he can only eat what men feed him. The bears know better, but they stick to us regardless. I rather like these bears."

It was the most self-evident of understatements. This was at an encampment on the top of a massive boulder which projected from a mountainous stony wall. This was six days from the start of their journey. There was barely room on the boulder for all the party. And Faro Nell fussily insisted that Nugget should be in the safest part, which meant near the mountain-flank. She would have crowded the men outward, but Nugget whimpered for Roane. Wherefore, when Roane moved to comfort him, Faro Nell contentedly drew back and snorted at Sitka and Sourdough and they made room for her near the edge.

It was a hungry camp. They had come upon tiny rills upon occasion, flowing down the mountain side. Here the bears had drunk deeply and the men had filled canteens. But this was the third night, and there had been no game at all. Huyghens made no move to bring out food for Roane or himself. Roane made no comment. He was beginning to participate in the relationship between bears and men, which was not the slavery of the bears but something more. It was two-way. He felt it.

"It would seem:" he said fretfully, "that since the sphexes don't seem to hunt on their way uphill, that there should be some game. They ignore everything as they file uphill."

This was true enough. The normal fighting formation of sphexes was line abreast, which automatically surrounded anything which offered to flee and outflanked anything which offered fight. But here they ascended the mountain in long lines, one after the other, following apparently longestablished trails. The wind blew along the slopes and carried scent only sidewise. But the sphexes were not diverted from their chosen paths. The long processions of hideous blue-and-tawny creatures—it was hard to think of them as natural beasts, male and female and laying eggs like reptiles on other planets—simply climbed.

"There've been other thousands of beasts before them," said Huyghens. "They must have been crowding this way for days or even weeks. We've seen tens of thousands in Semper's camera. They must be uncountable, altogether. The first-comers ate all the game there was, and the last-corners have something else on whatever they use for minds."

Roane protested: "But so many carnivores in one place is impossible! I know they are here, but they can't be!"

"They're cold-blooded," Huyghens pointed out. "They don't burn food to sustain body-temperature. After all, lots of creatures go for long periods without eating. Even bears hibernate. But this isn't hibernation— or estivation, either."

He was setting up the radiation-wave receiver in the darkness. There was no point in attempting a fix here. The transmitter was on the other side of the Sere Plateau, which inexplicably swarmed with the most ferocious and deadly of all the creatures of Loren Two. The men and bears would commit suicide by crossing here.

But Huyghens turned on the receiver. There came the whispering, scratchy sound of background-noise. Then the signal. Three dogs, three dashes, three dots. Three dots, three dashes, three dots. It went on and on and on. Huyghens turned it off. Roane said:

"Shouldn't we have answered that signal before we left the station? To encourage them?"

"I doubt they have a receiver," said Huyghens. "They won't expect an answer for months, anyhow. They'd hardly listen all the time, and if they're living in a mine-tunnel and trying to sneak out for food to stretch their supplies—why, they'll be too busy to try to make complicated recorders or relays."

Roane was silent for a moment or two.

"We've got to get food for the bears," he said presently. "Nugget's weaned, and he's hungry."

"We will," Huyghens promised. "I may be wrong, but it seems to me that the number of sphexes climbing the mountain is less than yesterday and the day before. We may have just about crossed the path of their migration. They're thinning out. When we're past their trail, we'll have to look out for night-walkers and the like again. But I think they wiped out all animal life on their migration-route."

He was not quite right. He was waked in darkness by the sound of slappings and the grunting of bears. Feather-light puffs of breeze beat upon his face. He struck his belt-lamp sharply and the world was hidden by a whitish film which snatched itself away. Something flapped. Then he saw the stars and the emptiness on the edge of which they camped. Then big white things flapped toward him.

Sitka Pete whuffed mightily and swatted. Faro Nell grunted and swung. She caught something in her claws. She crunched. The light went off as Huyghens realized. Then he said:

"Don't shoot, Roane!" He listened, and heard the sounds of feeding in the dark. It ended. "Watch this!" said Huyghens.

The belt-light came on again. Something strangely-shaped and pallid like human skin reeled and flapped crazily toward him. Something else. Four. Five—ten—twenty—more...

A huge hairy paw reached up into the light-beam and snatched a flying thing out of it. Another great paw. Huyghens shifted the light and the three great Kodiaks were on their hind legs, swatting at creatures which flittered insanely, unable to resist the fascination of the glaring lamp. Because of their wild gyrations it was impossible to see them in detail, but they were those unpleasant night-creatures which looked like plucked flying monkeys but were actually something quite different.

The bears did not snarl or snap. They swatted, with a remarkable air of businesslike competence and purpose. Small mounds of broken things built up about their feet.

Suddenly there were no more. Huyghens snapped off the light. The bears crunched and fed busily in the darkness.

"Those things are carnivores and blood-suckers, Roane," said Huyghens calmly. "They drain their victims of blood like vampire bats—they've some trick of not waking them—and when they're dead the whole tribe eats. But bears have thick furs, and they wake when they're touched. And they're omnivorous—they'll eat anything but sphexes, and like it. You might say that those night-creatures came to lunch. But they stayed. They are it—for the bears, who are living off the country as usual."

Roane uttered a sudden exclamation. He made a tiny light, and blood flowed down his hand. Huyghens passed over his pocket kit of antiseptic and bandages. Roane stanching the bleeding and bound up his hand. Then he realized that Nugget chewed on something. When he turned the light, Nugget swallowed convulsively. It appeared that he had caught and devoured the creature which had drawn blood from Roane. But Roane had lost none to speak of, at that.

In the morning they started along the sloping scarp of the plateau once

more. During the morning, Roane said painfully:

"Robots wouldn't have handled those vampire-things, Huyghens."

"Oh, they could be built to watch for them," said Huyghens, tolerantly. "But you'd have to swat for yourself. I prefer the bears."

He led the way on. Here their jungle-formation could not apply. On a steep slope the bears ambled comfortably, the tough pads of their feet holding fast on the slanting rock, but the men struggled painfully. Twice Huyghens halted to examine the ground about the mountains' bases through binoculars. He looked encouraged as they went on. The monstrous peak which was like the bow of a ship at the end of the Sere Plateau was visibly nearer. Toward midday, indeed, it looked high above the horizon, no more than fifteen miles away. And at midday Huyghens called a final halt.

"No more congregations of sphexes down below," he said cheerfully, "and we haven't seen a climbing line of them in miles." The crossing of a sphex-trail meant simply waiting until one party had passed, and then crossing before another came in view. "I've a hunch we've crossed their migration-route. Let's see what Semper tells us!"

He waved the eagle aloft. And Semper, like all creatures other than men, normally functioned only for the satisfaction of his appetite, and then tended to loaf or sleep. He had ridden the last few miles perched on Sitka Pete's pack. Now he soared upward and Huyghens watched in the small vision-plate.

Semper went soaring—and the image on the plate swayed and turned and turned—and in minutes was above the plateau's edge. And here there was some vegetation and the ground rolled somewhat, and there were even patches of brush. But as Semper towered higher still, the inner desert appeared. But nearby it was clear of beasts. Only once, when the eagle banked sharply and the camera looked along the long dimension of the plateau, did Huyghens see any sign of the blue-and-tan beasts. There he saw what looked like masses amounting to herds. But, of course, carnivores do not gather in herds.

"We go straight up," said Huyghens in satisfaction. "We cross the plateau here—and we can edge downwind a bit, even. I think we'll find something interesting on our way to your robot colony."

He waved to the bears to go ahead uphill.

They reached the top hours later—barely before sunset. And they saw game. Not much, but game at the grassy, brushy border of the desert. Huyghens brought down a shaggy ruminant which surely would not live on a desert. When night fell there was an abrupt chill in the air. It was much colder than night-temperatures on the slopes. The air was thin. Roane thought confusedly and presently guessed at the cause. In the lee of the prow-mountain the air was calm. There were no clouds. The ground radiated its heat to empty space. It could be bitterly cold in the nighttime, here.

"And hot by day," Huyghens agreed when he mentioned it. "The sunshine's terrifically hot where the air is thin, but on most mountains there's wind. By day, here, the ground will tend to heat up like the surface of a planet without atmosphere. It may be a hundred and forty or fifty degrees on the sand at midday. But it should be cold at night."

It was. Before midnight Huyghens built a fire. There could be no danger of night-walkers where the temperature dropped to freezing.

In the morning the men were stiff with cold, but the bears snorted and moved about briskly. They seemed to revel in the morning chill. Sitka and Sourdough Charley, in fact, became festive and engaged in a mock fight, whacking each other with blows that were only feigned, but would have crushed in the skull of any man. Nugget sneezed with excitement as he watched them. Faro Nell regarded them with female disapproval.

They went on. Semper seemed sluggish. After a single brief flight he descended and rode on Sitka's pack, as on the previous day. He perched there, surveying the landscape as it changed from semi-arid to pure desert in their progress. His air was arrogant. But he would not fly. Soaring birds do not like to fly when there are no winds to make currents of which to take

advantage. On the way, Huyghens painstakingly pointed out to Roane exactly where they were on the enlarged photograph taken from space, and the exact spot from which the distress-signal seemed to come.

"You're doing it in case something happens to you," said Roane. "I admit it's sense, but--what could I do to help those survivors even if I got to them, without you?"

"What you've learned about sphexes would help," said Huyghens. "The bears would help. And we left a note back at my station. Whoever grounds at the landing field back there--and the beacon's working again--will find instructions to come to the place we're trying to reach."

Roane plodded alongside him. The narrow non-desert border of the Sere Plateau was behind them, now. They marched across powdery desert sand.

"See here," said Roane. "I want to know something! You tell me you're listed as a bear-thief on your home planet. You tell me it's a lie-- to protect your friends from prosecution by the Colonial Survey. You're on your own, risking your life every minute of every day. You took a risk in not shooting me. Now you're risking more in going to help men who'd have to be witnesses that you were a criminal. What are you doing it for?"

Huyghens grinned.

"Because I don't like robots. I don't like the fact that they're subduing men--making men subordinate to them."

"Go on," insisted Sourdough. "I don't see why disliking robots should make you a criminal. Nor men subordinating themselves to robots, either!"

"But they are," said Huyghens mildly. "I'm a crank, of course. But-- I live like a man on this planet. I go where I please and do what I please. My helpers, the bears, are my friends. If the robot colony had been a success, would the humans in it have lived like men? Hardly! They'd have to live the way the robots let them! They'd have to stay inside a fence the robots built. They'd have to eat foods that robots could raise, and no others. Why--a man couldn't move his bed near a window, because if he did the house-tending robots couldn't work! Robots would serve them--the way the robots determined--but all they'd get out of it would be jobs servicing the robots!"

Roane shook his head.

"As long as men want robot service, they have to take the service that robots can give. If you don't want those services--"

"I want to decide what I want," said Huyghens, again mildly, "instead of being limited to choose among what I'm offered. On my home planet we halfway tamed it with dogs and guns. Then we developed the bears, and we finished the job with them. Now there's population-pressure and the room for bears and dogs--and men--is dwindling. More and more people are being deprived of the power of decision, and being allowed only the power of choice among the things robots allow. The more we depend on robots, the more limited those choices become. We don't want our children to limit themselves to wanting what robots can provide! We don't want them shriveling to where they abandon everything robots can't give--or won't! We want them to be men--and women. Not damned automatons who live by pushing robot-controls so they can live to push robot-controls. If that's not subordination to robots--"

"It's an emotional argument," protested Roane. "Not everybody feels that way."

"But I feel that way," said Huyghens. "And so do a lot of others. This is a big galaxy and it's apt to contain some surprises. The one sure thing about a robot and a man who depends on them is that they can't handle the unexpected. There's going to come a time when we need men who can. So on my home planet, some of us asked for Loren Two, to colonize. It was refused--too dangerous. But men can colonize anywhere if they're men. So I came here to study the planet. Especially the sphexes. Eventually, we expected to ask for a license again, with proof that we could handle even those beasts. I'm already doing it in a mild way. But the Survey licensed a robot colony--and where is it?"

Roane made a sour face.

"You picked the wrong way to go about it, Huyghens. It was illegal. It is. It was the pioneer spirit, which is admirable enough, but wrongly directed. After all, it was pioneers who left Earth for the stars. But—"

Sourdough raised up on his hind legs and sniffed the air. Huyghens swung his rifle around to be handy. Roane slipped off the safety-catch of his own. Nothing happened.

"In a way:" said Roane vexedly, "you're talking about liberty and freedom, which most people think is politics. You say it can be more. In principle, I'll concede it. But the way you put it, it sounds like a freak religion."

"It's self-respect," corrected Huyghens.

"You may be—"

Faro Nell growled. She bumped Nugget with her nose, to drive him closer to Roane. She snorted at him. She trotted swiftly to where Sitka and Sourdough faced toward the broader, sphex-filled expanse of the Sere Plateau. She took up her position between them.

Huyghens gazed sharply beyond them and then all about.

"This could be bad!" he said softly. "But luckily there's no wind. Here's a sort of hill. Come along, Roane!"

He ran ahead, Roane following and Nugget plumping heavily with him. They reached the raised place—actually a mere hillock no more than five or six feet above the surrounding sand, with a distorted cactuslike growth protruding from the ground. Huyghens stared again. He used his binoculars.

"One sphex," he said curtly. "Just one! And it's out of all reason for a sphex to be alone! But it's not rational for them to gather in hundreds of thousands, either!" He wetted his finger and held it up. "No wind at all."

He used the binoculars again.

"It doesn't know we're here," he added. "It's moving away. Not another one in sight—" He hesitated, biting his lips. "Look here, Roane! I'd like to kill that one lone sphex and find out something. There's a fifty per cent chance I could find out something really important. But—I might have to run. If I'm right—" Then he said grimly, "It'll have to be done quickly. I'm going to ride Faro Nell—for speed. I doubt Sitka or Sourdough would stay behind. But Nugget can't run fast enough. Will you stay here with him?"

Roane drew in his breath. Then he said calmly:

"You know what you're doing. Of course."

"Keep your eyes open. If you see anything, even at a distance, shoot and we'll be back—fast! Don't wait until something's close enough to hit. Shoot the instant you see anything—if you do!"

Roane nodded. He found it peculiarly difficult to speak again. Huyghens went over to the embattled bears. He climbed up on Faro Nell's back, holding fast by her shaggy fur.

"Let's go!" he snapped. "That way! Hup!"

The three Kodiaks plunged away at a dead run, Huyghens lurching and swaying on Faro Nell's back. The sudden rush dislodged Semper from his perch. He flapped wildly and got aloft. Then he followed effortfully, flying low.

It happened very quickly. A Kodiak bear can travel as fast as a race horse on occasion. These three plunged arrow-straight for a spot perhaps half a mile distant, where a blue-and-tawny shape whirled to face them. There was the crash of Huyghens' weapon from where he rode on Faro Nell's back—the explosion of the weapon and the bullet was one sound. The somehow unnatural spiky monster leaped and died.

Huyghens jumped down from Faro Nell. He became feverishly busy at something on the ground—where the parti-colored sphex had fallen. Semper banked and whirled and came down to the ground. He watched, with his head on one side.

Roane stared, from a distance. Huyghens was doing something to the dead

sphex. The two male bears prowled about. Faro Nell regarded Huyghens with intense curiosity. Back at the hillock, Nugget whimpered a little. Roane patted him roughly. Nugget whimpered more loudly. In the distance, Huyghens straightened up and took three steps toward Faro Nell. He mounted. Sitka turned his head back toward Roane. He seemed to see or sniff something dubious. He reared upward. He made a noise, apparently, because Sourdough ambled to his side. The two great beasts began to trot back. Semper flapped wildly and—lacking wind—lurched crazily in the air. He landed on Huyghens' shoulder and his talons clung there.

Then Nugget howled hysterically and tried to swarm up Roane, as a cub tries to swarm up the nearest tree in time of danger. Roane collapsed, and the cub upon him—and there was a flash of stinking scaly hide, while the air was filled with the snarling, spitting squeals of a sphex in full leap. The beast had overjumped, aiming at Roane and the cub while both were upright and arriving when they had fallen. It went tumbling.

Roane heard nothing but the fiendish squalling, but in the distance Sitka and Sourdough were coming at rocketship speed. Faro Nell let out a roar and fairly split the air. And then there was a furry cub streaking toward her, bawling, while Roane rolled to his feet and snatched up his gun. He raged through pure instinct. The sphex crouched to pursue the cub and Roane swung his weapon as a club. He was literally too close to shoot— and perhaps the sphex had only seen the fleeing bear-cub. But he swung furiously.

And the sphex whirled. Roane was toppled from his feet. An eighthundred-pound monstrosity straight out of hell—half wildcat and half spitting cobra with hydrophobia and homicidal mania added—such a monstrosity is not to be withstood when in whirling its body strikes one in the chest.

That was when Sitka arrived, bellowing. He stood on his hind legs, emitting roars like thunder, challenging the sphex to battle. He waddled forward. Huyghens arrived, but he could not shoot with Roane in the sphere of an explosive bullet's destructiveness. Faro Nell raged and snarled, torn between the urge to be sure that Nugget was unharmed, and the frenzied fury of a mother whose offspring has been endangered.

Mounted on Faro Nell, with Semper clinging idiotically to his shoulder, Huyghens watched helplessly as the sphex spat and squalled at Sitka, having only to reach out one claw to let out Roane's life.

V

They got away from there, though Sitka seemed to want to lift the limp carcass of his victim in his teeth and dash it repeatedly to the ground. He seemed doubly raging because a man—with whom all Kodius Champion's descendants had an emotional relationship—had been mishandled. But Roane was not grievously hurt. He bounced and swore as the bears raced for the horizon. Huyghens had flung him up on Sourdough's pack and snapped for him to hold on. He bumped and chattered furiously:

"Dammit, Huyghens! This isn't right! Sitka got some deep scratches! That horror's claws may be poisonous!"

But Huyghens snapped, "Hup! Hup!" to the bears, and they continued their race against time. They went on for a good two miles, when Nugget wailed despairingly of his exhaustion and Faro Nell halted firmly to nuzzle him.

"This may be good enough," said Huyghens. "Considering that there's no wind and the big mass of beasts is down the plateau and there were only those two around here. Maybe they're too busy to hold a wake, even! Anyhow—"

He slid to the ground and extracted the antiseptic and swabs.

"Sitka first," snapped Roane. "I'm all right!"

Huyghens swabbed the big bear's wounds. They were trivial, because Sitka Pete was an experienced sphex-fighter. Then Roane grudgingly let the curiously-smelling stuff—it reeked of ozon-e—be applied to the slashes on his chest. He held his breath as it stung. Then he said dourly:



"It was my fault, Huyghens. I watched you instead of the landscape. I couldn't imagine what you were doing."

"I was doing a quick dissection," Huyghens told him. "By luck, that first sphex was a female, as I hoped. And she was just about to lay her eggs. Ugh! And now I know why the sphexes migrate, and where, and how it is that they don't need game up here."

He slapped a quick bandage on Roane. He led the way eastward, still putting distance between the dead sphexes and his party. It was a crisp walk, only, but Semper flapped indignantly overhead, angry that he was not permitted to ride again.

"I'd dissected them before," said Huyghens. "Not enough's been known about them. Some things needed to be found out if men were ever to be able to live here."

"With bears?" asked Roane ironically.

"Oh, yes," said Huyghens. "But the point is that sphexes come to the desert here to breed—to mate and lay their eggs for the sun to hatch. It's a particular place. Seals return to a special place to mate—and the males at least don't eat for weeks on end. Salmon return to their native streams to spawn. They don't eat, and they die afterward. And eels—I'm using Earth examples, Roane—travel some thousands of miles to the Sargasso to mate and die. Unfortunately, sphexes don't appear to die, but it's clear that they have an ancestral breeding place and that they come here to the Sere Plateau to deposit their eggs!"

Roane plodded onward. He was angry: angry with himself because he hadn't taken elementary precautions; because he'd felt too safe, as a man in a robot-served civilization forms the habit of doing; because he hadn't used his brain when Nugget whimpered, in even a bear-cub's awareness that danger was near.

"And now," Huyghens added, "I need some equipment that the robot colony had. With it, I think we can make a start toward making this a planet that men can live like men on!"

Roane blinked.

"What's that?"

"Equipment," said Huyghens impatiently. "It'll be at the robot colony. Robots were useless because they wouldn't pay attention to sphexes. They'd still be. But take out the robot controls and the machines will do! They shouldn't be ruined by a few months' exposure to weather!"

Roane marched on and on. Presently he said:

"I never thought you'd want anything that came from that colony, Huyghens!"

"Why not?" demanded Huyghens impatiently. "When men make machines do what they want, that's all right. Even robots—when they're where they belong. But men will have to handle flame-casters in the job I want them for. There have to be some, because there was a hundredmile clearing to be burned off. And Earth-sterilizers—intended to kill the seeds of any plants that robots couldn't handle. We'll come back up here, Roane, and at the least we'll destroy the spawn of these infernal beasts! If we can't do more than that—just doing that every year will wipe out the race in time. There are probably other hordes than this, with other breeding places. But we'll find them, too. We'll make this planet into a place where men from my world can come—and still be men!"

Roane said sardonically:

"It was sphexes that beat the robots. Are you sure you aren't planning to make this world safe for robots?"

Huyghens laughed shortly.

"You've only seen one night-walker," he said. "And how about those things on the mountain-slope—which would have drained you of blood and then feasted? Would you care to wander about this planet with only a robot bodyguard, Roane? Hardly! Men can't live on this planet with only robots to help them—and stop them from being fully men! You'll see!"

They found the colony after only ten days more of travel and after many sphexes and more than a few staglike creatures and shaggy ruminants had fallen to their weapons and the bears. But first they found the survivors of the colony.

There were three of them, hard-bitten and bearded and deeply embittered. When the electrified fence went down, two of them were away at a mine-tunnel, installing a new control-panel for the robots who worked in it. The third was in charge of the mining operation. They were alarmed by the stopping of communication with the colony and went back in a tank-truck to find out what had happened, and only the fact that they were unarmed saved them. They found sphexes prowling and caterwauling about the fallen colony, in numbers they still did not wholly believe. And the sphexes smelled men inside the armored vehicle, but couldn't break in. In turn, the men couldn't kill them, or they'd have been trailed to the mine and besieged there for as long as they could kill an occasional monster.

The survivors stopped all mining-of course--and tried to use remote-controlled robots for revenge and to get supplies for them. Their mining-robots were not designed for either task. And they had no weapons. They improvised miniature throwers of burning rocket-fuel, and they sent occasional prowling sphexes away scsteaming with scorched hides. But this was useful only because it did not kill the beasts. And it cost fuel. In the end they barricaded themselves and used the fuel only to keep a spark-signal going against the day when another ship came to seek the colony. They stayed in the mine as in a prison, on short rations, waiting without real hope. For diversion they could only contemplate the mining-robots they could not spare fuel to run and which could not do anything but mine.

When Huyghens and Roane reached them, they wept. They hated robots and all things robotic only a little less than they hated sphexes. But Huyghens explained, and armed them with weapons from the packs of the bears, and they marched to the dead colony with the male Kodiaks as point and advance-guard, and with Faro Nell bringing up the rear. They killed sixteen sphexes on the way. In the now overgrown clearing there were four more. In the shelters of the colony they found only foulness and the fragments of what had been men. But there was some food--not much, because the sphexes clawed at anything that smelled of men, and had ruined the plastic packets of radiation-sterilized food. But there were some supplies in metal containers which were not destroyed.

And there was fuel, which men could dispense when they got to the control-panels of the equipment. There were robots everywhere, bright and shining and ready for operation, but immobile, with plants growing up around and over them.

They ignored those robots. But lustfully they fueled tracked flamecasters--adapting them to human rather than robot operation--and the giant soil-sterilizer which had been built to destroy vegetation that robots could not be made to weed out or cultivate. And they headed back for the Sere Plateau, burning-eyed and filled with hate.

But Nugget became a badly spoiled bear-cub, because the freed men approved passionately of anything that would even grow up to kill sphexes. They petted him to excess, when they camped.

And they reached the plateau by a sphex-trail to the top. And Semper scouted for sphexes, and the giant Kodiaks disturbed them and the sphexes came squalling and spitting to destroy them--and while Roane and Huyghens fired steadily, the great machines swept up with their special weapons. The Earth-sterilizer, it was found, was deadly against animal life as well as seeds, when its diathermic beam was raised and aimed. But it had to be handled by a man. No robot could decide just when it was to be used, and against what target.

Presently the bears were not needed, because the scorched corpses of sphexes drew live ones from all parts of the plateau even in the absence of

noticeable breezes. The official business of the sphexes was presumably finished, but they came to caterwaul and seek vengeance—which they did not find. Presently the survivors of the robot colony drove machines—as men needed to do, here—in great circles around the hugest heap of slaughtered fiends, destroying new arrivals as they came. It was such a killing as men had never before made on any planet, but there would not be many left of the sphex-horde which had bred in this particular patch of desert. There might be other hordes elsewhere, and other breeding places, but the normal territory of this mass of monsters would see few of them this year.

Or next year, either. Because the soil-sterilizer would go over the dug-up sand where the sphex-spawn lay hidden for the sun to hatch. And the sun would never hatch them.

But Huyghens and Roane, by that time, were camped on the edge of the plateau with the Kodiaks. They were technically upwind from the scene of slaughter—and somehow it seemed more befitting for the men of the robot colony to conduct it. After all, it was those men whose companions had been killed.

There came an evening when Huyghens amiably cuffed Nugget away from where he sniffed too urgently at a stag-steak cooking on the campfire. Nugget ambled dolefully behind the protecting form of Roane and sniveled.

"Huyghens," said Roane painfully, "we've got to come to a settlement of our affairs. I'm a Colonial Survey officer. You're an illegal colonist. It's my duty to arrest you."

Huyghens regarded him with interest.

"Will you offer me lenience if I tell on my confederates," he asked mildly, "or may I plead that I can't be forced to testify against myself?"

Roane said vexedly:

"It's irritating! I've been an honest man all my life, but—I don't believe in robots as I did, except in their place. And their place isn't here. Not as the robot colony was planned, anyhow. The sphexes are nearly wiped out, but they won't be extinct and robots can't handle them. Bears and men will have to live here or—the people who do will have to spend their lives behind sphex-proof fences, accepting only what robots can give them. And there's much too much on this planet for people to miss it! To live in a robot-managed controlled environment on a planet like Loren Two wouldn't. . . it wouldn't be self-respecting!"

"You wouldn't be getting religious, would you?" asked Huyghens dryly. "That was your term for self-respect before."

Semper, the eagle, squawked indignantly as Sitka Pete almost stepped on him, approaching the fire. Sitka Pete sniffed, and Huyghens spoke to him sharply, and he sat down with a thump. He remained sitting in an untidy lump, looking at the steak and drooling.

"You don't let me finish!" protested Roane querulously. "I'm a Colonial Survey officer, and it's my job to pass on the work that's done on a planet before any but the first-landed colonists may come there to live. And of course to see that specifications are followed. Now—the robot colony I was sent to survey was practically destroyed. As designed, it wouldn't work. It couldn't survive."

Huyghens grunted. Night was falling. He turned the meat over the fire.

"Now, in emergencies," said Roane carefully, "colonists have the right to call on any passing ship for aid. Naturally! So— I've always been an honest man before, Huyghens—my report will be that the colony as designed was impractical, and that it was overwhelmed and destroyed except for three survivors who holed up and signaled for help. They did, you know!"

"Go on," grunted Huyghens.

"So," said Roane querulously, "it just happened—just happened, mind you—that a ship with you and Sitka and Sourdough and Faro Nell on board—and Nugget and Semper, too, of course—picked up the distress-call. So you landed to help the colonists. And you did. That's the story. Therefore it isn't illegal for you to be here. It was only illegal for you to be here when you

were needed. But we'll pretend you weren't."

Huyghens glanced over his shoulder in the deepening night. He said calmly:

"I wouldn't believe that if I told it myself. Do you think the Survey will?"

"They're not fools," said Roane tartly. "Of course they won't! But when my report says that because of this unlikely series of events it is practical to colonize the planet, whereas before it wasn't—and when my report proves that a robot colony alone is stark nonsense, but that with bears and men from your world added, so many thousand colonists can be received per year— And when that much is true, anyhow—"

Huyghens seemed to shake a little as a dark silhouette against the flames. A little way off, Sourdough sniffed the air hopefully. With a bright light like the fire, presently naked-looking flying things might appear to be slapped down out of the air. They were succulent—to a bear.

"My reports carry weight," insisted Roane. "The deal will be offered, anyhow! The robot colony organizers will have to agree or they'll have to fold up. It's true! And your people can hold them up for nearly what terms they choose."

Huyghens' shaking became understandable. It was laughter.

"You're a lousy liar, Roane," he said, chuckling. "Isn't it unintelligent and unreasonable and irrational to throw away a lifetime of honesty just to get me out of a jam? You're not acting like a rational animal, Roane. But I thought you wouldn't, when it came to the point."

Roane squirmed.

"That's the only solution I can think of. But it'll work."

"I accept it," said Huyghens, grinning. "With thanks. If only because it means another few generations of men living like men on a planet that is going to take a lot of taming. And—if you want to know—because it keeps Sourdough and Sitka and Nell and Nugget from being killed because I brought them here illegally."

Something pressed hard against Roane. Nugget, the cub, pushed urgently against him in his desire to get closer to the fragrantly cooking meat. He edged forward. Roane toppled from where he squatted on the ground. He sprawled. Nugget sniffed luxuriously.

"Slap him," said Huyghens. "He'll move back."

"I won't!" said Roane indignantly from where he lay. "I won't do it! He's my friend!"