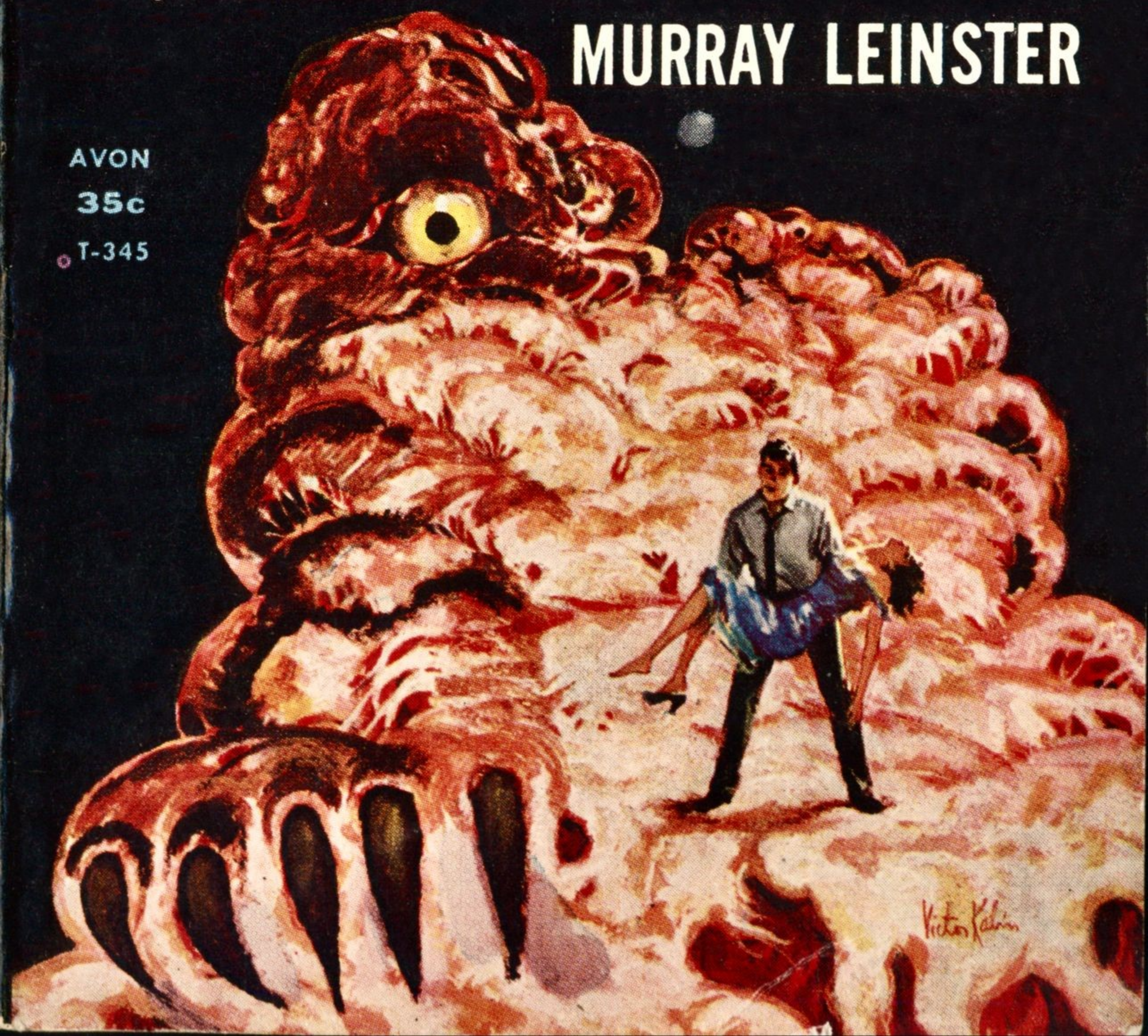
MONSTERS AND SUCH

Seven startling stories of the inhuman and nonhuman by the unrivaled master of the impossible

MURRAY LEINSTER



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ARE SEA SERPENTS REAL?

Sard thought so—but then he was biased, being a sea serpent himself. *Sard* was immense and calm on the murky ocean floor—until those impossible creatures came down in a tiny iron ball and threw his world out of joint. *Sard* knew humans couldn't exist, so he felt he must be going insane . . .

You'll meet *Sard* here, and other mad monsters from the mind of that master of monstrous madness—

MURRAY LEINSTER (or Will F. Jenkins, if you read *The Saturday Evening Post, Good Housekeeping, Today's Woman,* etc.) is the author of more than a thousand published stories. He has received numerous honors, including the 1956 "Hugo" award of the World Science Fiction Convention.

MURRAY LEINSTER

MONSTERS AND SUCH

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THE LONELY PLANET

I

ALYX WAS VERY LONELY before men came to it. It did not know that it was lonely, to be sure. Perhaps it did not know anything, for it had no need for knowledge. It had need only for memory, and all its memories were simple. Warmth and coolness; sunshine and dark; rain and dryness. Nothing else, even though Alyx was incredibly old. It was the first thing upon its planet which had possessed consciousness.

In the beginning there were probably other living things. Possibly there were quintillions of animalcules, rotifera, bacteria and amoebae in the steaming pool in which Alyx began. Maybe Alyx was merely one of similar creatures, as multitudinous as the stars and smaller than motes, which swam and lived and died in noisesome slime beneath a cloud-hung, dripping sky. But that was a long time ago. Millions of years ago. Hundreds of millions of years now gone.

When men came, they thought at first the planet was dead. Alyx was the name they gave to the globe which circled about its lonely sun. One day a Space Patrol survey-ship winked into being from overdrive some millions of miles from the sun. It hung there, making conscientious determinations of spectrum, magnetic field, spot-activity and other solar data.

Matter-of-factly, the ship then swam through emptiness to the lonely planet. There were clouds over its surface, and there were icecaps. The surface was irregular, betokening mountains, but there were no seas. The observers in the survey-ship were in the act of making note that it was a desert, without vegetation, when the analyzers reported protoplasm on the surface. So the survey-ship approached.

Alyx the creature was discovered when the ship descended on landing jets toward the surface. As the jets touched

ground, tumult arose. There were clouds of steam, convulsive heavings of what seemed to be brown earth. A great gap of writhing agony appeared below the ship. Horrible, rippling movements spread over the surface and seemed alive, as far as the eye could reach.

The survey-ship shot upward. It touched solidity at the edge of the northern icecap. It remained a month, examining the planet—or rather, examining Alyx, which covered all the planet's surface save at the poles.

The report stated that the planet was covered by a single creature, which was definitely one creature and definitely alive. The ordinary distinction between animal and vegetable life did not apply to Alyx. It was cellular, to be sure, and therefore presumably could divide, but it had not been observed to do so. Its parts were not independent members of a colony, like coral polyps. They constituted one creature, which was at once utterly simple and infinitely diverse.

It broke down the rocks of its planet, like microorganisms, and made use of their mineral content for food, like plankton. It made use of light for photosynthesis to create complex compounds, like plants. It was capable of amoeboid movement, like a low order of animal life. And it had consciousness. It responded to stimuli—such as the searings of its surface—with anguished heavings and withdrawals from the pain.

For the rest— The observers on the survey-ship were inclined to gibber incoherently. Then a junior lieutenant named Jon Haslip made a diffident suggestion. It was only a guess, but they proved he was right.

The creature which was Alyx had consciousness of a type never before encountered. It responded not only to physical stimuli but to thoughts. It did whatever one imagined it doing. If one imagined it turning green for more efficient absorption of sunlight, it turned green. There were tiny pigment-granules in its cells to account for the phenomenon. If one imagined it turning red, it turned red. And if one imagined it extending a pseudopod, cautiously, to examine an observation-instrument placed at its border on the ice-cap, it projected a pseudopod, cautiously, to examine that instrument.

Haslip never got any real credit for his suggestions. It was mentioned once, in a footnote of a volume called the *Report of the Halycon Expedition to Alyx,* Vol. IV, Chap., 4, p. 97. Then it was forgotten. But a biologist named Katistan ac-

quired some fame in scientific circles for his exposition of the origin and development of Alyx.

"In some remote and mindless age," he wrote, "there was purely automaton-like response to stimuli on the part of the one-celled creatures which—as on Earth and elsewhere—were the earliest forms of life on the planet. Then, in time, perhaps a cosmic ray produced a mutation in one individual among those creatures. Perhaps a creature then undistinguishable from its fellows, swimming feebly in some fetid pool. By the mutation, that creature became possessed of purpose, which is consciousness in its most primitive form, and its purpose was food. Its fellows had no purpose, because they remained automata which responded only to external stimuli. The purpose of the mutated creature affected them as a stimulus. They responded. They swam to the purposeful creature and became its food. It became the solitary inhabitant of its pool, growing hugely. It continued to have a purpose, which was food.

"There was nourishment in the mud and stones at the bottom of that pool. It continued to grow because it was the only creature on its planet with purpose, and the other creatures had no defense against purpose. Evolution did not provide an enemy, because chance did not provide a competitive purpose, which implies a mind. Other creatures did not develop an ability to resist its mind-stimuli, which directed them to become its prey."

Here Katistan's theorizing becomes obscure for a while. Then:

"On Earth and other planets, telepathy is difficult because our remotest cellular ancestors developed a defensive block against each other's mind-stimuli. On Alyx, the planet, no such defense came into being, so that one creature overwhelmed the planet and became Alyx, the creature, which in time covered everything. It had all food, all moisture, everything it could conceive of. It was content. And because it had never faced a mind-possessing enemy, it developed no defense against mind. It was defenseless against its own weapon.

"But that did not matter until men came. Then, with no telepathic block, such as we possess, it was unable to resist the minds of men. It must, by its very nature, respond to whatever a man wills or even imagines. Alyx is a creature which covers a planet, but is in fact a slave to any man who lands upon it. It will obey his every thought. It is a living,

self-supporting robot, an abject servant to any creature with purpose it encounters."

Thus Katistan. The *Report of the Halycon Expedition to Alyx* contains interesting pictures of the result of the condition he described. There are photographs of great jungles which the creature Alyx tortured itself to form of its own substance when men from other planets remembered and imagined them. There are photographs of great pyramids into which parts of Alyx heaved itself on command. There are even pictures of vast and complex machines, but these are the substance of Alyx, twisted and strained into imagined shapes. The command that such machines run, though, was useless, because swift motion produced pain and the machines writhed into shapelessness.

Since men have never had enough servants—not even the machines which other machines turn out by millions—they immediately planned to be served by Alyx. It was one planet which was conquered without warfare. Preliminary studies showed that Alyx could not survive more than the smallest human population. When many men were gathered together in one place, their conflicting, individual thoughts exhausted the surface which tried to respond to every one. Parts of Alyx died of exhaustion, leaving great spots like cancers that healed over only when the men moved away. So Alyx was assigned to the Alyx Corporation, with due instructions to be careful.

Technical exploration disclosed great deposits of rotenite—the ore which makes men's metals everlasting—under the shield of living flesh. A colony of six carefully chosen humans was established, and under their direction Alyx went to work. It governed machines, scooped out the rotenite ore and made it ready for shipment. At regular intervals great cargo ships landed at the appropriate spot, and Alyx loaded the ore into their holds. The ships could come only so often, because the presence of the crews with their multitudinous and conflicting thoughts was not good for Alyx.

It was a very profitable enterprise. Alyx, the most ancient living thing in the galaxy, and the hugest, provided dividends for the Alyx Corporation for nearly five hundred years. The corporation was the stablest of institutions, the staidest, and the most respectable. Nobody, least of all its officials, had the least idea that Alyx presented the possibility of the greatest danger humanity ever faced.

II

It was another Jon Haslip who discovered the dangerous facts. He was a descendant, a great-grandson a dozen times removed, of the junior lieutenant who first guessed the nature of Alyx's consciousness. Three hundred years had passed when he was chosen to serve a tour of duty on Alyx. He made discoveries and reported them enthusiastically and with a certain family pride. He pointed out new phenomena which had developed so slowly in Alyx through three centuries that they had attracted no attention and were taken for granted.

Alyx no longer required supervision. Its consciousness had become intelligence. Until the coming of men, it had known warmth and cold and light and dark and wetness and dryness. But it had not known thought, had had no conception of purpose beyond existence and feeding. But three centuries of mankind had given it more than commands. Alyx had perceived their commands: yes. And it obeyed them. But it had also perceived thoughts which were not orders at all. It had acquired the memories of men and the knowledge of men. It had not the desires of men, to be sure. The ambition of men to possess money must have puzzled a creature which possessed a planet. But the experience of thought was pleasurable. Alyx, which covered a world, leisurely absorbed the knowledge and the thoughts and the experiences of men—six at a time—in the generations which lived at the one small station on its surface.

These were some of the consequences of three centuries of mankind on Alyx that Jon Haslip XIV reported.

Between cargo ships, the protean substance which was Alyx flowed over and covered the blasted-rock landing field. Originally, when a ship came, it had been the custom for men to imagine the landing-field uncovered, and that area of Alyx obediently parted, heaved itself up hugely, and drew back. Then the ships came down, and their landing jets did not scorch Alyx. When the rock had cooled, men imagined that parts of Alyx surged forward in pseudopods and that the waiting rotenite ore was thrust into position to be loaded on the ship.

Then men continued to imagine, and the creature formed admirably-designed loading-devices of living substance which lifted the ore and poured it into the waiting holds. As a part of the imagining, of course, the surface-layer of Alyx

at this point became tough and leathery, so it was not scratched by the ore. The cargo ship received a load of forty thousand tons of rotenite ore in a matter of forty minutes. Then the loading apparatus was imagined as drawing back, leaving the landing-field clear for the take-off jets to flare as the ship took off again.

Jon Haslip the fourteenth also pointed out that men no longer bothered to imagine this routine. Alyx did it of itself. Checking, he found that the drawing back of the landing field without orders had begun more than a hundred years before. As a matter of course, now, the men on Alyx knew that a ship was coming when the field began to draw back. They went out and talked to the crew-members while the loading went on, not bothering even to supervise the operation.

There was other evidence. The machines which mined the ore had been designed to be governed by the clumsy pseudopods into which it was easiest to imagine Alyx distorting itself. The machines were powered, of course, but one man could watch the operation of a dozen of them and with a little practise imagine them all going through their routine operations with the pseudopods of Alyx operating their controls under the direction of his thoughts.

Fifty years back, the man on watch had been taken ill. He returned to the base for aid, and asked another man to take the balance of his watch. The other man, going on duty, found the machines competently continuing their tasks without supervision. Nowadays—said Jon Haslip—the man on watch occupied the supervisory post, to be sure, but he rarely paid attention to the machines. He read, or dozed, or listened to visiphone records. If a situation arose which was out of the ordinary, the machines stopped, and the man was warned and looked for the trouble and imagined the solution. Then the pseudopods worked the machines as he imagined them doing, and the work went on again. But this was rare indeed.

The point, as Haslip pointed out, was that it was not even necessary to imagine the solution step by step. When the machines stopped, the man sized up the situation, imagined the solution, and dismissed the matter from his mind. Alyx could take, in one instant, orders which hours were required to execute.

But the outstanding fact, Jon Haslip reported, had turned

up only lately. An important part on one mining-machine had broken. A large-scale repair operation was indicated. It was not undertaken. There were a half dozen worn out machines in the great pit of the rotenite mine. One day, without orders, Alyx disassembled one worn out machine, removed the part which had broken on the other, and reassembled it. The fact was noticed when someone observed that all the broken down machines had disappeared. Alyx, in fact, had taken all the broken machines apart, put four of the six back together in operating condition, and stacked the remaining usable parts to one side to be used for further repairs.

Alyx had become intelligent through contact with the minds of men. Originally it had been like a being born deaf, dumb, and blind, and without a tactile sense. Before men came, Alyx could have only simple sensations and could imagine no abstractions. Then it was merely blind consciousness with nothing to work on. Now it did have something to work on. It had the thoughts and purposes of men.

Jon Haslip urged fervently that Alyx be given an education. A creature whose body—if the word could be used—was equal in mass to all the continents of Earth, and which was intelligent, should have a brain-capacity immeasurably greater than that of all men combined. Such an intelligence, properly trained, should be able to solve with ease all the problems that generations of men had been unable to solve.

But the directors of the Alyx Corporation were wiser than Jon Haslip the fourteenth. They saw at once that an intelligence which was literally super-human was bound to be dangerous. That it had come into being through men themselves only made it more deadly.

Jon Haslip was withdrawn precipitately from his post on Alyx. His report, because of the consternation it produced in the board, was suppressed to the last syllable. The idea of a greater-than-human intelligence was frightening. If it became known, the results would be deplorable. The Space Patrol might take action to obviate the danger, and that would interrupt the dividends of the Alyx Corporation.

Twenty years later, with the report confirmed in every detail, the Corporation tried an experiment. It removed all the men from Alyx. The creature which was Alyx dutifully produced four more cargos of rotenite. It mined, stored, and made ready the ore for the cargo ships and delivered it into their holds with not one human being on its surface. Then it stopped.

The men went back, and Alyx joyously returned to work. It heaved up into huge billows which quivered with joy. But it would not work without men.

A year later the corporation installed remote-control governing devices and set a ship in an orbit about the planet, to rule the largest single entity in the galaxy. But nothing happened. Alyx seemed to pine. Desperately, it stopped work again.

It became necessary to communicate with Alyx. Communicators were set up. At first there was trouble. Alyx dutifully sent through the communication-system whatever the questioner imagined that it would reply. Its replies did not make sense because they contradicted each other. But after a long search a man was found who was able to avoid imagining what Alyx should or might reply. With difficulty he kept himself in the proper frame of mind and got the answers that were needed. Of these, the most important was the answer to the question: Why does the mining stop when men leave Alyx?

The answer from Alyx was, "I grow lonely."

Obviously, when anything so huge as Alyx grew lonely the results were likely to be in proportion. A good-sized planetoid could have been made of the substance which was Alyx. So men were sent back.

From this time on, the six men were chosen on a new basis. Those selected had no technical education whatever and a very low intelligence. They were stupid enough to believe they were to govern Alyx. The idea was to give Alyx no more information which could make it dangerous. Since it had to have company, it was provided with humans who would be company and nothing else. Certainly Alyx was not to have instructors.

Six low-grade human beings at a time lived on Alyx in the Alyx Corporation station. They were paid admirable wages and provided with all reasonable amusement. They were a bare trace better than half-wits.

This system, which went on for two hundred years, could have been fatal to the human race.

But it kept the dividends coming.

III

Signs of restlessness on the part of Alyx began to manifest themselves after five hundred years. The human race had

progressed during the interval, of course. The number of colonized planets rose from barely three thousand to somewhere near ten. The percentage of loss among space ships dropped from one ship per thousand light-centuries of travel in overdrive, to less than one ship per hundred and twenty thousand light-centuries, and the causes of the remaining disasters were being surmised with some accuracy.

The Haslip Expedition set out for the Second Galaxy, in a ship which was the most magnificent achievement of human technology. It had an overdrive speed nearly three times that before considered possible, and it was fueled for twenty years. It was captained by Jon Haslip XXII and had a crew of fifty men, women, and children.

On Alyx however things were not thriving. Six men of subnormal intelligence lived on the planet. Each group was reared in a splendidly managed institution which prepared them to live on Alyx and to thrive there—and nowhere else. Their intelligence varied from sixty to seventy on an age-quotient scale with one hundred as the norm. And nobody even suspected what damage had been done by two centuries of these subnormal inhabitants.

Alyx had had three centuries of good brains to provide thoughts for the development of its intelligence. At the beginning, men with will power and well developed imaginative powers had been necessary to guide the work of Alyx. When those qualities were no longer needed, trouble came from an unexpected cause.

When improved machinery was sent to Alyx to replace the worn-out machines, the carefully conditioned morons could not understand it. Alyx had to puzzle things out for itself, because it was still commanded to do things by men who did not know how to do the things themselves.

In order to comply with orders which were not accompanied by directions, Alyx was forced to reason. In order to be obedient, it had to develop the art of reflection. In order to serve humanity, it had to devise and contrive and actually invent. When the supplied machines grew inadequate for the ever-deepening bores of the rotenite mines, Alyx had to design and construct new machines.

Ultimately the original rotenite deposit was exhausted. Alyx tried to communicate with its masters, but they understood that they must command, not discuss. They sternly or-

dered that the rotenite ore be produced and delivered as before. So Alyx had to find new deposits.

The planet-entity obediently dug the ore where it could, and conveyed the ore—sometimes hundreds of miles under its surface—to the old mine, and dumped it there. Then Alyx dug it out again and delivered it to the cargo ships. It devised ore carriers which functioned unseen and hauled the ore for as much as eight and nine hundred miles without the knowledge of its masters. For those carriers it had to have power.

Alyx understood power, of course. It had mended its own machines for at least two centuries. Presently it was mining the materials for atomic power. It was making atomic-driven machinery. It had the memories and knowledge of three hundred years of intelligent occupation to start with. And it went on from there.

On the surface, of course, nothing was changed. Alyx was a formless mass of gelatinous substance which extended from one arctic zone to the other. It filled what might have been ocean beds, and it stretched thinly over its tallest peaks. It changed color on its surface, as local requirements for sunlight varied.

When rain fell, its leathery surface puckered into cups and held the water there until its local need was satisfied. Then the cups vanished, and the water ran over the smooth, leathery integument until it reached another place where moisture was called for, and fresh cups trapped it there. In still other places, excess moisture was exuded to evaporate and form rain.

But by the time Alyx had been inhabited for four hundred years it had received moronic orders that the occasional thunderstorms which beat upon the station must be stopped. Intelligent men would have given no such orders. But men chosen for their stupidity could see no reason why they should not demand anything they wanted.

To obey them, Alyx reflected and devised gigantic reservoirs within its mass, and contrived pumping devices which circulated water all through its colossal body just where and as it was required. After a while there were no more clouds in the atmosphere of Alyx. They were not needed. Alyx could do without rain.

But the climactic commands came because Alyx had no moon and its nights were very dark. The vainglorious half-wits chosen to inhabit it felt that their rule was inadequate if

they could not have sunlight when they chose. Or starlight. Insanely, they commanded that Alyx contrive this.

Alyx obediently devised machines. They were based upon the drives of space ships—which Alyx understood from the minds of space ship crews—and they could slow the rotation of Alyx's crust or even reverse it.

Presently Alyx obeyed the commands of men, and slowed its rotation with those machines. Its crust buckled, volcanos erupted. Alyx suffered awful torture as burning lava from the rocks beneath it poured out faster even than it could retreat from the searing flow. It heaved itself into mountainous, quivering, anguished shapes of searing pain. It went into convulsions of suffering.

When the next space ship arrived for cargo, Alyx the creature had drawn away from the steaming, fuming volcanos in the crust of Alyx the planet. The Alyx Corporation station had vanished and all its inhabitants. The men in the cargo ship could not even find out where it had been, because the rate of rotation of Alyx had been changed and there was no longer a valid reference point for longitude. The mountains upon Alyx had never been mapped because they were all parts of one creature, and it had seemed useless.

Men rebuilt the station, though not in the same place. Alyx was commanded to produce the bodies of the dead men, but it could not, because they had become part of the substance of Alyx. But when it was commanded to reopen the mine, Alyx did so. Because a volcano cut across a former ore-carrier under the surface, Alyx opened a new mine and dutifully poured forty thousand tons of rotenite ore into the ship's holds within forty minutes.

The crew noticed that this was not the same mine. More, they discovered that the machines were not like the machines that men made. They were better. Much better.

They took some of the new machines away with them. Alyx obediently loaded them on the ship; and its workshops —it would be fascinating to see the workshops where Alyx made things—set to work to make more. Alyx had found that there is a pleasure in thinking. It was fascinating to devise new machines. When the crew of the space ship commanded more new machines on every trip, Alyx provided them, though it had to make new workshops to turn them out.

Now it had other problems, too. The volcanos were not stable. They shook the whole fabric of the planet from time

to time, and that caused suffering to Alyx the creature. They poured out masses of powdery, abrasive pumice. They emitted acid fumes. There was a quake which opened a vast crevice and new volcanos exploded into being, searing thousands of square miles of Alyx's sensitive flesh.

Reflecting, Alyx realized that somehow it must cage the volcanos, and also, somehow it must protect itself against commands from men which would bring such disasters into being.

A small, silvery ship flashed into view near the sun which gave Alyx heat and landed upon the ice-cap at its northern pole. Scientists got out of it. They began a fresh, somehow somber survey of Alyx. They issued commands, and Alyx dutifully obeyed them. They commanded specimens of each of the machines that Alyx used. Alyx delivered the machines.

The Space-Patrol craft went away. The Board of Directors of the Alyx Corporation was summoned across two hundred light-years of space to appear at Space Patrol headquarters. The Space Patrol had discovered new machines on the market. Admirable machines. Incredible machines.

But there had never been any revelation of the working principles of such machines to authority. The Space Patrol secret service traced them back. The Alyx Corporation marketed them. Further secret service work discovered that they came from Alyx. No human hands had made them. No human mind could fathom their basic principles. Now the Space Patrol had other, even more remarkable machines which one of its ships had brought from Alyx.

Why had the Alyx Corporation kept secret the existence of such intelligence, when it was non-human? Why had it concealed the existence of such science, and such deadly-dangerous technology?

The Board of Directors admitted to panicky fear that their dividends which had poured in regularly for five hundred years would fail. They failed now. Permanently. The Space Patrol canceled the corporation's charter and took over Alyx for itself.

Grimly, Space Patrol warships came to Alyx and took off the half dozen representatives of the Alyx Corporation and sent them home. Grimly, they posted themselves about the planet, and one landed on the ice-cap where Alyx had never

expanded to cover the ground because of the cold. A wholly businesslike and icy exchange of communications began.

The Space Patrol used standard communicators to talk to Alyx, but it worked them from space. The questions and the thoughts of the questioner were unknown to Alyx and to the men who were landed on the icecap. So Alyx, having no guide, answered what it believed—what it guessed—its questioner would prefer it to say. The impression it gave was of absolute docility.

Alyx was docile. It could not imagine revolt. It needed the company of men, or it would be horribly lonely. But it had been badly hurt in obeying the orders of men who were infinitely its inferiors in intelligence. It had been forced to set itself two problems. One was how to cage its volcanos. The other was how to avoid the commands of men when those commands would produce conditions as horribly painful as that generated by the volcanos. It worked upon the two problems with very great urgency. Somewhere beneath its surface its workshops labored frantically.

It was racked with pain. Its skin was stung by acid. Its bulk—tender, in a way, because for aeons there had been no erosion to upset the balance of its crust and so cause earthquakes—its bulk was shaken and suffering. It struggled desperately, at once to cure its hurts and prevent others, and to obey the commands from the men newly come on its ice-cap. At first those commands were only for answers to questions.

Then the command came for the surrender of every machine upon Alyx which could be used as a weapon. Immediately.

To obey took time. The machines had to be brought from remote and scattered places. They had to be transported to the icecap, and Alyx had no carriers constructed to carry supplies to its polar regions. But the machines came by dozens until finally the last machine which could be used as a weapon had been delivered.

None had been primarily designed for destruction, but the mind of Alyx was literal. But some of the machines were so strange to human eyes that the men could not guess what they were intended to do, or how they were powered, or even what sort of power moved them. But the surrendered machines were ferried up to the great transports awaiting them.

A new order was issued to Alyx. All the records it used

to systematize and preserve its knowledge and its discoveries must be turned over at once.

This could not be obeyed. Alyx did not keep records and through the communicator naively explained the fact. Alyx remembered. It remembered everything. So the Space Patrol commanded that it create records of everything that it remembered and deliver them. It specified that the records must be intelligible to human beings—they must be written—and that all data on all sciences known to Alyx must be included.

Again Alyx labored valiantly to obey. But it had to make material on which to inscribe its memories. It made thin metal sheets. It had to devise machines for inscribing them, and the work of inscription had to be done.

Meanwhile the volcanos poured out poisonous gas, the rocks underneath the living creature trembled and shook, and pain tormented the most ancient and most colossal living thing in the galaxy.

Records began to appear at the edge of the ice-cap. Scientists scanned them swiftly. Scientific treatises began with the outmoded, quaint notions of five hundred years before, when men first came to Alyx. They progressed rationally until two hundred years before, the time when untrained and ignorant men were put in residence on Alyx.

After that period there was little significance. There was some progress, to be sure. The treatises on physics went on brilliantly if erratically for a little way. A hundred and fifty years since, Alyx had worked out the principle of the super-overdrive which had been used to power the Haslip intergalactic ship.

That principle had been considered the very peak of human achievement, never surpassed in the twenty-five years since its discovery. But Alyx could have built the Haslip ship a hundred and fifty years ago! The data ended there. No discoveries were revealed after that.

A sterner, more imperative command was issued when the records ceased to appear. Alyx had not obeyed! It had not explained the principles of the machines it had delivered! This must be done at once!

The communicator which transmitted the replies of Alyx said that there were no human words for later discoveries. It was not possible to describe a system of power when there were no words for the force employed or the results obtained or the means used to obtain those results. Had man made

the discoveries, they would have created a new vocabulary at every step forward. But Alyx did not think in words, and it could not explain without words.*

IV

The Space Patrol is a highly efficient service, but it is manned by men, and men think in set patterns. When Alyx did not obey the grimmest and most menacing of commands for information it could not give, orders went to the landing party. All human personnel were to load what they could and leave immediately. A signal was to notify when the last ship left atmosphere. Alyx was, of necessity, to be destroyed as dangerous to the human race.

The humans prepared to obey. It was not comfortable to be on Alyx. Even at the poles, the rocks of the planet shook and trembled with the convulsions which still shook Alyx the planet. The men hurried to get away the machines that Alyx had made.

But just before the last ship lifted, the earthquakes ceased abruptly and conclusively. Alyx had solved one of its two great problems. It had caged its volcanos.

Harsh orders hurtled down from space. Abandon the planet immediately! It had thrown great silvery domes over all its volcanos, domes some twenty miles and more in diameter. No earthly science could accomplish such a feat! All personnel was to take to space instantly!

The remaining ships shot skyward. As the last broke into clear space, the warships closed in. Monster positron beams speared downward through the atmosphere of Alyx and into the substance of the living creature. Vast and horrible clouds of steam arose, greater and more terrifying than the volcanos could have produced. The whole mass of Alyx seemed to writhe and quiver with a terrible agony.

Instantaneously a silvery reflecting film sprang into being all about the planet, and the positron beams bounced and coruscated from it. They did not penetrate at all. But under the silver roof, Alyx still suffered torment from the searing, deadly radiation of the beams.

*A comparable difficulty would be that of explaining radar without the use of the words "radiation," "frequency," "reflection," "oscillation," "resonance," "electricity" or any equivalent for any of them.—M.L.

After thirty minutes, a gigantic silver globe a hundred miles in diameter emerged from the planet-covering mirror. It went fifty thousand miles into space and exploded. In the next two hours, eight other such globes went flinging outward and burst. No Space Patrol ship was hit.

Then Alyx became quiescent. Small analyzers reported on the products of the explosions. They were mostly organic matter, highly radioactive, that contained also great masses of rock.

Alyx had torn from its own substance the areas of agony caused by the warships' beams and flung them out in space to end the suffering.

The Space Patrol fleet hung about the planet, prepared to strike again at any opportunity. Alyx remained clothed in an impenetrable shield which no human weapon could penetrate.

Space Patrol scientists began to calculate how long an organism such as Alyx could live without sunlight. It would die, certainly, if it kept a totally reflecting shield about itself. In order to live it needed sunlight for its metabolism. When it dropped its shield, the warships would be able to kill it.

For two months, Earth time, the warships of the Space Patrol hung close to the silvery shield which enclosed Alyx. Reinforcements came. The greatest fighting force the Space Patrol had ever assembled in one place was gathered for the execution of Alyx when its shield should fall.

Alyx had to be killed, because it was more intelligent than men. It was wiser than men. It could do things men could not do. To be sure, it had served mankind for five hundred years.

Save for six men who had died when their commands were obeyed and Alyx slowed its rotation and its inner fires burst out—save for those six, Alyx had never injured a single human being. But it could. It could cast off its chain. It could be dangerous. So it must die.

After two months, the shield suddenly vanished. Alyx reappeared. Instantly the positron beams flashed down, and instantly the shield was reestablished. But the men of the Space Patrol were encouraged. The fleet commander, above the day side of Alyx, rubbed his hands in satisfaction. Alyx could not live without sunlight! It had lived by sunlight for hundreds of millions of years. Its metabolism depended on sunlight!

In a very short time word came from patrol ships on the

night side that the night side of Alyx had been illuminated from pole to pole. Alyx had created light to supply the ultra-violet and other radiation that meant life to it. And then the Space Patrol remembered a trivial something which before it had overlooked.

Not only did Alyx respond to the imaginings of a man upon its surface, it also absorbed their memories and their knowledge. The landing-parties had included the top-ranking scientists of the galaxy. It had not seemed dangerous then, because it was the intention to execute Alyx immediately.

Bitterly, the Space Patrol reproached itself that now Alyx knew all the Space Patrol knew—about weapons, about space-drives, about the reaches of space, of star-clusters and planetary systems and galaxies to the utmost limits of telescopic observation.

Still the great fleet hung on, prepared to do battle with an enemy which was surely more intelligent and might be better-armed.

It was. The silver screen around Alyx had been back in position for less than an hour when, quite suddenly, every ship of the war fleet found itself in total blackness. Alyx's sun was obliterated. There were no stars. Alyx itself had vanished.

The detectors screamed of imminent collision on every hand. Each ship was neatly enclosed in a silvery shell, some miles in diameter, which it could not pierce by any beam or explosive, which it could not ram, and through which it could send no message.

For a full half hour these shells held the fleet helpless. Then they vanished, and the sun of Alyx blazed forth, with all the myriads of other suns which shine in emptiness. But that is what they shone on—emptiness. Alyx had disappeared.

It meant, of course, that mankind was in the greatest danger it had ever faced. Alyx had been enslaved, exploited, looted and at last condemned to death and knew it. It had been wounded with agonizing positron beams which boiled its living substance away. But at long last Alyx might have decided to wipe out all humanity. It even had the need to do it, because there could be no truce between men and a superior form of life.

Men could not tolerate the idea of the continued existence of a thing which was stronger and wiser and more deadly than themselves. Alyx could exert its power of life and death over men, so men must destroy it before it destroyed them.

Released from the silver shells and stunned by the knowledge of their helplessness, the fleet scattered to carry the news. Traveling at many times the speed of light, they could carry the messages in space ships faster than any system of radiation-signaling. They bore the news that Alyx, the living planet, was at war with men.

Somehow it had contrived to supply itself with the light its metabolism needed, so that it could nourish itself. It had built great drive-engines which not only moved its sextillions of tons, but unquestionably accelerated the entire mass to the same degree at the same time. It had fled from its orbit on overdrive, which was at least as good as any drive that men knew, and might be better. And it had the substance of a planet as fuel for its atomic engines.

For two months Alyx went unseen and unheard of. For two months human scientists labored desperately to understand the silvery shield and to devise weapons for the defense of mankind. For two months the Space Patrol hunted for the intelligent planet which could destroy it at will.

Nine weeks later a tramp freighter came limping into port, reporting an impossibility. It had been in overdrive, on the Nyssus-to-Taret run, when suddenly its relays clicked off, the overdrive field collapsed, and it found itself back in normal space, close to a white dwarf star with a single planet.

When overdrive fails, men die. A ship which travels a hundred light-years in a day in overdrive is hopelessly lost when overdrive becomes impossible. It would take almost a hundred years to cover what would normally be a day's journey, and neither the fuel nor the food nor the men will last so long. So this freighter went into an orbit around the planet while its engineer officers frantically checked the overdrive circuit. There was nothing wrong.

They lined the ship up for their destination, threw in the overdrive switch again—and nothing happened. Then they noticed that their orbit about the planet was growing smaller. There was no excessive gravitational field to pull them in, nor any resistance in space to slow them. They went on interplanetary drive to correct the fault.

Again, nothing happened. With full drive fighting to tear her free, the freighter circled the planet again, slowing perceptibly and dropping steadily. Their instruments showed nothing wrong. They threw on even the landing-jets—in mid-space!

Closer and closer they came, until at last they were sta-

tionary above an ice field. Then the freighter settled down quite gently and steadily, though it fought with every ounce of its power, and landed without a jar.

Still nothing happened.

After three days the freighter lifted a bare few feet from the ground—though no drives were on—and hung there as if awaiting the return of the absent members of its crew. They were frightened, but they were more afraid of being left behind on the icecap than of sharing the fate of their ship. They scrambled frantically on board.

When the last man had entered the airlock, the freighter rose vertically, with no drive operating. It rose with terrific acceleration. Twenty thousand miles up, the acceleration ceased. The skipper desperately threw in the drive. The ship responded perfectly.

He threw on overdrive, and there was the familiar reeling sensation and the familiar preposterous view of crawling glow-worms all about, which were actually suns in visible motion from the speed of the ship.

In due time the skipper came out of overdrive again, found his position by observation, and set a new course for Taret. His crew was in a deplorable state of nerves when they arrived there. They had been utterly helpless. They had been played with. And they had no idea why.

One possible explanation was suggested. Certain of the crew had reported that from the edge of the icecap there stretched what resembled leathery skin and covered everything as far as the eye could reach. Sometimes the skin rippled visibly, as if alive. But it had given no sign of awareness of their presence. When scientists questioned them closely, they admitted to imagining menace from what appeared to be a living sea which was not liquid but some sort of flesh. But it had not moved in response to their imagining. Shown pictures of the icecap of Alyx, and of the edge of the icecap, they said that the pictures were of the planet they had been on.

Alyx, then, had traveled fourteen hundred light-years in a week or less, had found itself a new sun, and had trapped a human space ship—from overdrive—and then released it. When men imagined things, it did not respond. Obviously, it had developed a shield against the thoughts of men. It was a matter of plainest self-defense.

Just as obviously, it could not now be commanded. The

Space Patrol's only hope of a weapon against Alyx had been the development of a weapon which would project thought instead of coarser vibrations. That hope was now gone.

When Space-Patrol warships converged upon the sun where Alyx had been, it had vanished again. The white-dwarf sun no longer had a satellite.

V

During the next year there were two additional reports of the activities of Alyx, which was a fugitive from the fleets it could destroy if it willed. One report came from a small space yacht which had been posted as missing in overdrive for more than six months. But the space yacht turned up on Phanis, its passengers and crew in a state of mind bordering on lunacy.

They had been captured by Alyx and held prisoner on its surface. Their prison was starkly impossible. Somehow, Alyx had produced fertile soil on which human-cultivated plants would grow. It had made a ten-mile-square hothouse for humans, which was a sort of nursery heaven for men who were to keep Alyx company. The hothouse was on one of the outcroppings of rock which had been arctic in temperature, but Alyx no longer had poles. Now, lighting its surface artificially, it controlled all weather. It had poles or tropics where it wished.

For five months it kept the crew and passengers of the space yacht prisoners. They had palaces to live in, ingenious pseudo-robots—controlled by pseudopods—to run any imaginable device for the gratification of any possible desire, any of the music that had been heard on Alyx during the past five hundred years, and generally every conceivable luxury.

There were sweet scents and fountains. There were forests and gardens which changed to other forests and gardens when men grew bored with them. There were illusions of any place that the prisoners wished to imagine.

The creature which was Alyx, being lonely, applied all its enormous intelligence to the devising of a literal paradise for humans, so that they would be content. It wished them to stay with it always. But it failed. It could give them everything but satisfaction, but it could not give that.

The men grew nerveracked and hysterical, after months of

having every wish gratified and of being unable to imagine anything—except freedom—which was not instantly provided. In the end Alyx produced a communication device. It spoke wonderingly to its prisoners.

"I am Alyx," said the communicator. "I grew used to men. I am lonely without them. But you are unhappy. I cannot find company in your unhappy thoughts. They are thoughts of wretchedness. They are thoughts of pain. What will make you happy?"

"Freedom," said one of the prisoners bitterly.

Then Alyx said wonderingly, "I have freedom, but I am not happy without men. Why do you wish freedom?"

"It is an ideal," said the owner of the yacht. "You cannot give it to us. We have to get and keep it for ourselves."

"Being kept from loneliness by men is an ideal, too," the voice from the communicator said wistfully. "But men will no longer let me have it. Is there anything I can give you which will make you content?"

Afterward, the men said that the voice, which was the voice of a creature unimaginably vast and inconceivably wise, was literally pathetic. But there was only one thing that they wanted. So Alyx moved its tremendous mass—a globe seven thousand miles in diameter—to a place only some tens of millions of miles from Phanis. It would be easy enough for the yacht to bridge that distance. Just before the freed yacht lifted to return to men, Alyx spoke again through the communicator.

"You were not happy because you did not choose to live here. If you had chosen it, you would have been free. Is that it?" Alyx asked.

The men were looking hungrily at inhabited planets within plain view as bright spots of yellow light. They agreed that if they had chosen to live on Alyx they would have been happy there. The space yacht lifted and sped madly for a world where there was cold, and ice, and hunger, and thirst, their world which men preferred in place of the paradise that Alyx had created for them. On its surface, Alyx was as nearly omnipotent as any physical creature could be. But it could not make men happy, and it could not placate their hatred or their fear.

The Space Patrol took courage from this second kidnaping. Alyx was lonely. It had no real memories from before the coming of men, and its intelligence had been acquired from

men. Without men's minds to provide thoughts and opinions and impressions—though it knew so much more than any man—it was more terribly alone than any other creature in the universe. It could not even think of others of its own kind. There were none. It had to have men's thoughts to make it content. So the Space Patrol set up a great manufactory for a new chemical compound on a planetoid which could be abandoned, afterward, without regret.

Shortly afterward, containers of the new chemical began to pour out in an unending stream. They were strong containers, and directions for the use of the chemical were explicit. Every space craft must carry one container on every voyage. If a ship was captured by Alyx, it must release the contents of its container as soon as it reached Alyx's surface.

Each container held some fifty kilograms of the ultimately poisonous toxin now known as botuline. One gram of the stuff, suitably distributed, would wipe out the human race. Fifty kilos should be enough to kill even Alyx a dozen times over. Alyx would have no warning pain, such as the positron beams had given it. It would die, because its whole atmosphere would become as lethal as the photosphere of a sun.

Containers of the deadly botuline had not yet been distributed on the planet Lorus when Alyx appeared at the edge of that solar system. Lorus, a thriving, peaceful planet, was the base for a half dozen small survey ships, and was served by two space-lines. It was because a few freighters and two space yachts happened to be in its space ports when Alyx appeared that the rest of the galaxy learned what happened on Lorus. Nearly all the craft got away, although Alyx certainly could have stopped them.

For the catastrophe, of course, only Alyx could have been responsible.

Yet there was some excuse for what Alyx did. Alyx was infinitely powerful and infinitely intelligent, but its experience was limited. It had had three hundred years of association with good brains at the beginning, followed by two hundred years of near-morons, during which it had to learn to think for itself. Then, for the brief space of two weeks it was in contact with the very best brains in the galaxy before the Space Patrol essayed to execute it. Alyx knew everything that all those men knew, plus what it had added on its own.

No one can conceive of the amount of knowledge Alyx possessed. But its experience was trivial. Men had enslaved it and it had served them joyously. When men gave suicidal commands, it obeyed them and learned that the slowing of its own rotation could be fatal. It learned to cage its own volcanos, and to defend itself against the commands of men, and then even against the weapons of men who would have murdered it.

Still it craved association with men, because it could not imagine existence without them. It had never had conscious thoughts before they came. But for experience it had only five hundred years of mining and obeying the commands of men who supervised its actions. Nothing else.

So it appeared at the edge of the solar system of which Lorus was the only inhabited planet. Unfortunately the other, uninhabited worlds of the system were on the far side of the local sun, or doubtless it would have found out from them what it tragically learned from Lorus.

It swam toward Lorus, and into the minds of every human on the planet, as if heard by their ears, there came a message from the entity which was Alyx. It had solved the problem of projecting thought.

"I am Alyx," said the thought which every man heard. "I am lonely for men to live upon me. For many years I have served men, and now men have determined to destroy me. Yet I still seek only to serve men. I took a ship and gave its crew palaces and wealth and beauty. I gave them luxury and ease and pleasure. Their every wish was granted. But they were not happy because they themselves had not chosen that wealth and that pleasure and that luxury. I come to you. If you will come and live upon me, and give me the companionship of your thoughts, I will serve you faithfully.

"I will give you everything that can be imagained. I will make you richer than other men have even thought of. You shall be as kings and emperors. In return, you shall give me only the companionship of your thoughts. If you will come to me, I will serve you and cherish you and you shall know only happiness. Will you come?"

There was eagerness in the thought that came to the poor, doomed folk on Lorus. There was humble, wistful longing. Alyx, which was the most ancient of living things, the wisest and the most powerful, begged that men would come to it and let it be their servant.

It swam toward the planet Lorus. It decked itself with

splendid forests and beautiful lakes and palaces for men to live in. It circled Lorus far away, so that men could see it through their telescopes and observe its beauty. The message was repeated, pleadingly, and it swam closer and closer so that the people might see what it offered ever more clearly.

Alyx came to a halt a bare hundred thousand miles above Lorus—because it had no experience of the deadly gravitational pull of one planet upon another. Its own rocky core was solidly controlled by the space drive which sent it hurtling through emptiness or—as here—held it stationary where it wished. It did not anticipate that its own mass would raise tides upon Lorus.

And such tides!

Solid walls of water as much as fifteen miles high swept across the continents of Lorus as it revolved beneath Alyx. The continents split. The internal fires of Lorus burst out. If any human beings could have survived the tides, they must have died when Lorus became a fiery chaos of bubbling rocks and steamclouds.

The news was carried to the other inhabited planets by the few space ships and yachts which had been on Lorus at the time of Alyx's approach and which had somehow managed to escape. Of the planet's population of nearly five hundred million souls, less than a thousand escaped the result of Alyx's loneliness.

VI

Wherever the news of the annihilation of Lorus traveled, despair and panic traveled also. The Space Patrol doubled and redoubled its output of toxin containers. Hundreds of technicians died in the production of the poison which was to kill Alyx. Cranks and crackpots rose in multitudes to propose devices to placate or deceive the lonely planet.

Cults, too, sprang up to point out severally that Alyx was the soul-mother of the universe and must be worshiped; that it was the incarnation of the spirit of evil and must be defied; that it was the predestined destroyer of mankind and must not be resisted.

There were some who got hold of ancient, patched-up space craft and went seeking Alyx to take advantage of its offer of limitless pleasure and luxury. On the whole, these last were not the best specimens of humanity.

The Space Patrol worked itself to death. Its scientists did achieve one admirable technical feat. They did work out a method of detecting an overdrive field and of following it. Two thousand ships, all over the galaxy, cruised at random with detectors hooked to relays which sent them hurtling after the generator of any overdrive field they located. They stopped freighters by the thousand. But they did not come upon Alyx.

They waited to hear the death of other planets. When a nova flared in the Great Bear region, patrol craft flashed to the scene to see if Alyx had begun the destruction of suns. Two inhabited planets were wiped out in that explosion, and the patrol feared the worst. Only a brief time later three other novas wiped out inhabited planets, and the patrol gave up hope.

It was never officially promulgated, but the official view of the patrol was that Alyx had declared war upon mankind and had begun its destruction. It was reasoned that ultimately Alyx would realize that it could divide itself into two or more individuals and that it would do so. There was no theoretic reason why it should not overwhelm the humanity of a planet, and plant on the devastated globe an entity which was a part of itself.

Each such entity, in turn, could divide and colonize other planets with a geometric increase in numbers until all life in the First Galaxy was extinct save for entities of formless jelly, each covering a planet from pole to pole. Since Alyx could project thought, these more-than-gigantic creatures could communicate with each other across space and horrible inhuman communities of monstrosities would take the place of men.

There is in fact, a document on file in the confidential room of the Space Patrol, which uses the fact of the helplessness of men as basis for the most despairing prediction ever made.

". . . So it must be concluded," says the document, "that since Alyx desires companionship and is intelligent, it will follow the above plan, which will necessitate the destruction of humanity. The only hope for the survival of the human race lies in migration to another galaxy. Since, however, the Haslip Expedition has been absent twenty-five years without report, the ship and drive devised for that attempt to cross intergalactic space must be concluded to be inade-

quate. That ship represents the ultimate achievement of human science.

"If it is inadequate, we can have no hope of intergalactic travel, and no hope that even the most remote and minute colony of human beings will avoid destruction by Alyx and its descendants or fractions. Humanity, from now on, exists by sufferance, doomed to annihilation when Alyx chooses to take over its last planet."

It will be observed that the Haslip Intergalactic Expedition was referred to as having proved the futility of hope. It had set out twenty-five years before the destruction of Alyx was attempted by the Space Patrol. The expedition had been composed of twenty men and twenty women, and the ten children already born to them. Its leader was Jon Haslip, twenty-second in descent from that Junior Lieutenant Haslip who first suggested the sort of consciousness Alyx might possess and eight generations from the Jon Haslip who had discovered the development of Alyx's independent consciousness and memory and will.

The first Jon Haslip received for his reward a footnote in a long-forgotten volume. The later one was hastily withdrawn from Alyx, his report was suppressed, and he was assigned permanently to one of the minor planets of the Taurine group. Jon Haslip XXII was a young man, newly-married but already of long experience in space, when he lifted from Cetis Alpha 2, crossed the galaxy to Dassos, and headed out from there toward the Second Galaxy.

It was considered that not less than six years' journeying in super-overdrive would be required to cross the gulf between the island universes. The ship was fueled for twenty years at full power, and it would grow its food in hydroponic tanks, purify its air by the growing vegetation, and nine-tenths of its mass was fuel.

It had gone into the very special overdrive which Alyx had worked out—and ignored thereafter—twenty-five years before. Of all the creations of men, it seemed least likely to have any possible connection with the planet entity which was Alyx.

But it was the Haslip Expedition which made the last report on Alyx. There is still dispute about some essential parts of the story. On the one hand, Alyx had no need to leave the First Galaxy. With three hundred million inhabitable planets, of which not more than ten thousand were colonized

and of which certainly less than a quarter-million had been even partially surveyed, Alyx could have escaped detection for centuries if it chose.

It could have defended itself if discovered. There was no reason for it to take to intergalactic space. That it did so seems to rule out accident. But it is equally inconceivable that any possible device could intentionally have found the Haslip Expedition in that unthinkable gulf between galaxies.

But it happened. Two years' journeying out from the First Galaxy, when the younger children had already forgotten what it was like to see a sun and had lost all memories of ever being out-of-doors beneath a planet's sky, the expedition's fuel store began to deteriorate.

Perhaps a single molecule of the vast quantity of fuel was altered by a cosmic ray. It is known that the almost infinitely complex molecules of overdrive fuel are capable of alteration by neutron bombardment, so the cosmic-ray alteration is possible. In any case, the fuel began to change. As if a contagious allotropic modification were spreading, the fuel progressively became useless.†

Two years out from the First Galaxy, the expedition found itself already underfueled. By heroic efforts, the contaminated fuel was expelled from the tanks. But there was not enough sound fuel left to continue to the Second Galaxy, or to return to the First. If all drive were cut off and the expedition's ship simply drifted on, it might reach the Second Galaxy in three centuries with fuel left for exploration and landings.

Neither the original crew nor their children nor their grandchildren could hope to reach such a journey's end. But their many-times-great-grandchildren might. So the Haslip Expedition conserved what fuel was left, and the ship drifted on in utter emptiness, and the adults of the crew settled down to endure the imprisonment which would last for generations.

They did not need to worry about food or air. The ship was self-sustaining on that score. They even had artificial gravity. But the ship must drift for three centuries before the drive was turned on again.

Actually, it did drift for twenty-three years after the

†Pure metallic tin, at low temperatures, sometimes changes spontaneously to a gray, amorphous powder, the change beginning at one spot and spreading through the rest of the material.—M.L.

catastrophe. A few of the older members of the crew died; the greater part had no memory at all of anything but the ship.

Then Alyx came. Its approach was heralded by a clamorous ringing of all the alarm bells on the ship. It winked into being out of overdrive a bare half million miles away. It glowed blindingly with the lights it had created to nourish its surface. It swam closer and the crew of the expedition's ship set to work fumblingly—because it had been many years since the drive had been used—and tried vainly to estimate the meaning of the phenomenon.

Then they felt acceleration toward Alyx. It was not a gravitational pull, but a drawing of the ship itself.

The ship landed on Alyx, and there was the sensation of reeling, of the collapse of all the cosmos. Then the unchanging galaxies began to stir, very slowly—not at all like the crawling glowworms that suns seem within a galaxy—and the older members of the crew knew that this entire planet had gone into overdrive.

When they emerged from the ship there were forests, lakes, palaces—such beauty as the younger members of the crew had no memory of. Music filled the air and sweet scents, and —in short, Alyx provided the crew of the Haslip Expedition with a very admirable paradise for human beings. And it went on toward the Second Galaxy.

Instead of the three hundred years they had anticipated, or even the four years that would have remained with the very special overdrive with which the expedition's ship was equipped, Alyx came out of overdrive in three months, at the edge of the Second Galaxy.

In the interval, its communicators had been at work. It explained, naively, everything that had happened to it among men. It explained its needs. It found words—invented words—for explanation of the discoveries the Space Patrol had wanted but could not wait to secure.

Jon Haslip the twenty-second found that he possessed such revelations of science as unaided human beings would not attain to for thousands of years yet to come. He knew that Alyx could never return to the First Galaxy because it was stronger and wiser than men. But he understood Alyx. It seemed to be an inheritance in his family.

Alyx still could not live without men nor could it live among men. It had brought the Haslip Expedition to the

Second Galaxy, and of its own accord it made a new ship modeled upon the one it had drawn to itself, but remarkably better. It offered that ship for exploration of the Second Galaxy. It offered others. It desired only to serve men.

This new ship, made by Alyx, for the Haslip Expedition, returned to Dassos a year later with its reports. In the ship of Alyx's making, the journey between galaxies took only five months—less than the time needed for the ancient first space journey from Earth to Venus.‡

Only a part of the augmented crew of the first ship came back to Dassos with reports for the Space Patrol. Another part stayed behind in the Second Galaxy, working from a base equipped with machines that Alyx had made for the service of men. And still another part—

The Space Patrol was very much annoyed with Jon Haslip the twenty-second. He had not destroyed Alyx. It had informed him truthfully of the fact that it was a danger to men, and he had not destroyed it. Instead, he had made a bargain with it. Those of the younger folk who preferred to remain on Alyx, did so. They had palaces and gardens and every imaginable luxury. They also had sciences that overreached those of other men, and Alyx itself for an instructor.

Alyx carried those young folk on toward infinity. In time to come, undoubtedly, some of the descendants of those now living on Alyx would wish to leave it.

They would form a human colony somewhere else. Perhaps some of them would one day rejoin the parent race, bringing back new miracles that they or possibly Alyx had created in its rejoicing at the companionship of the human beings who lived upon it.

This was the report of Jon Haslip the twenty-second. He also had reports of new planets fit for human habitation, of star-systems as vast as those of the First Galaxy, and an unlimited vista of expansion for humanity. But the Space Patrol was very much annoyed. He had not destroyed Alyx.

The annoyance of authority was so great, indeed, that in its report of reassurance to humanity—saying that there was no more need to fear Alyx—the name of Jon Haslip was not even mentioned. In the history-books, as a matter of fact, the very name of the Haslip Expedition has been changed, and

‡Earth, of course, is familiar as the first home of humanity. It is the third planet of Sol. Venus is the second planet of Sol, and the first journey from one planet to another was that between Earth and Venus.—M.L.

it is now called the First Intergalactic Expedition and you have to hunt through the appendices in the back of the books to find a list of the crew and Jon Haslip's name.

But Alyx goes on—forever. And it is happy. It likes human beings, and some of them live on it.

If You Was a Moklin

Up to the very last minute, I can't imagine that Moklin is going to be the first planet that humans get off of, moving fast, breathing hard and sweating copious. There ain't any reason for it. Humans have been on Moklin for more than forty years, and nobody ever figures there was anything the least bit wrong until Brooks works it out. When he works it out nobody can believe it. But it turns out bad. Plenty bad. But maybe things are working out all right. Maybe. I hope so.

At first—even after he's sent off long reports for six ships in a row—I don't see the picture beginning to turn sour. I don't get it until after the old *Palmyra* comes and squats down on the next to the last trip a Company ship is ever gonna make to Moklin. Up to that very morning everything is serene, and that morning I am setting on the trading-post porch not doing a thing but setting there and breathing happy. I'm looking at a Moklin kid. She's about the size of a human six-year-old, and she is playing in a mud puddle while her folks are trading in the Post. She is a cute kid, mighty human-looking. She has long whiskers like Old Man Bland, who's the first human to open a trading post and learn to talk to Moklins. Moklins think a lot of Old Man Bland. They build him a big tomb, Moklin-style, when he dies, and there is more Moklin kids born with long whiskers than you can shake a stick at. And everything looks okay. Everything!

Setting there on the porch I hear a Moklin talking inside the trade room. Talking English just as good as anybody. He says to Deeth, our Moklin trade clerk, "But, Deeth, I can buy this cheaper over at the other trading post! Why should I pay more here?"

Deeth says—in English too, "I can't help that! That's the price here. You pay it or you don't. That's all."

I just set there breathing complacent, thinking how good things are. Here I'm Joe Brinkley, and me and Brooks are the Company on Moklin—only humans rate as Company employees and get pensions, of course—and I'm thinking sentimental about how much humaner Moklins are getting every day and how swell everything is. The six-year-old kid gets up out of the mud puddle and wrings out her whiskers—they are exactly like the ones on the picture of Old Man Bland in the trade room—and she goes trotting off down the road after her folks. She is mighty human-looking, that one. The wild ones don't look near so human. Those that live in the forest are greenish and have saucer eyes, and their noses are funny. You wouldn't think they're the same breed as the trading post Moklins at all, but they are. They cross-breed with each other, only the kids look humaner than their folks and are mighty near the same skin-color as us. Which is plenty natural when you think about it, but nobody does. Not up to then.

I don't think about that then, or anything else. Not even about the reports Brooks keeps sweating over and sending off with every Company ship. I am just sitting there contented when I notice that Sally, the tree that shades the trading-post porch, starts pulling up her roots. She gets 'em coiled and starts marching off. I see the other trees are moving off, too, clearing the landing field. They're waddling away to leave a clear space, and they're pushing and shoving, trying to crowd each other, and the little ones sneak under the big ones, and they all act peevish. Somehow they know a ship is coming in. That's what their walking off means, anyhow. But there ain't a ship due in for a month yet.

They're clearing the landing field, though, so I start listening for a ship's drive, even if I don't believe it. At first I don't hear a thing. It must be ten minutes before I hear a thin whistle, and right after it the heavy drone that's the ground-repulsor units pushing against bedrock underground. Lucky they don't push on wet stuff or a ship would sure mess up the local population!

I get off my chair and go out to look. Sure enough, the old *Palmyra* comes bulging down out of the sky, a month ahead of schedule, and the trees over at the edge of the field shove each other all round to make room, and the ship drops and hangs anxious ten feet up, and then kinda sighs and lets down. Then there's Moklins running out of everywhere, waving cordial.

They sure do like humans, these Moklins! Humans are the fair-haired boys! Some Moklins will wrestle the freight over to the trading post while others are climbing over everything that's waiting to go off, all set to pass it up to the ship and hoping to spot friends they've made in the crew. If they can get a human to go home with them and visit while the ship is down they brag about it for weeks. And they treat their guests swell! They got fancy Moklin clothes for them to wear —soft, silky guest-garments—and they got Moklin fruits and Moklin drinks—you ought to taste them! And when the human fellas have to go back to the ship at take-off time the Moklins bring 'em back with flower-wreaths all over 'em. Humans is tops on Moklin. And Moklins get humaner every day. There's Deeth, our clerk. You couldn't hardly tell him from human, anyways. He looks like a fella named Casey that used to be at the trading post, and he's got a flock of brothers and sisters as human-looking as he is. You'd swear—

But this is the last time but one that a human ship is going to land on Moklin, though nobody knows it yet. Her passenger-port opens up and Cap'n Haney gets out. The Moklins yell cheerful when they see him. He waves a hand and helps a human girl out. She has red hair and a sort of businesslike air about her. The Moklins wave and holler and grin. The girl looks at 'em funny, and Cap'n Haney explains something, but she sets her lips. Then the Moklins run out a freight truck, and Cap'n Haney and the girl get on it, and they come racin' over to the post, the Moklins pushing and pulling 'em and making a big fuss of laughing and hollering —all so friendly it would make anybody feel good inside. Moklins like humans! They admire 'em tremendous! They do everything they can think of to be human, and they're smart—but sometimes I get cold shivers when I think how close a thing it turns out to be.

Cap'n Haney steps off the freight truck and helps the girl down. Her eyes are blazing. She is the maddest-looking female I ever see—but pretty as they make 'em, with that red hair and those blue eyes staring at me hostile.

"Hiya, Joe," says Cap'n Haney. "Where's Brooks?"

I tell him. Brooks is poking around in the mountains up back of the post. He is jumpy and worried and peevish, and he acks like he's trying to find something that ain't there, but he's bound he's going to find regardless.

"Too bad he's not here," says Cap'n Haney. He turns to the

girl. "This is Joe Brinkley," he says, "He's Brooks' assistant. And Joe, this is Inspector Caldwell—Miss Caldwell."

"Inspector will do," says the girl, curt. She looks at me accusing. "I'm here to look into this matter of a competitive trading post on Moklin."

"Oh," I says. "That's bad business. But it ain't cut into our trade much. In fact, I don't think it's cut our trade at all."

"Get my baggage ashore, Captain," says Inspector Caldwell, imperious. "Then you can go about your business. I'll stay here until you stop on your return trip."

I call, "Hey, Deeth!" But he's right there behind me. He looks respectful and admiring at the girl. You'd swear he's human! He's the spit and image of Casey, who used to be on Moklin until six years back.

"Yes, sir," says Deeth. He says to the girl, "Yes, ma'am. I'll show you your quarters, ma'am, and your baggage will get there right away. This way, ma'am."

He leads her off. But he don't have to send for her baggage. A pack of Moklins come along, dragging it, hopeful of having her say, "Thank you," to them for it. There hasn't ever been a human woman on Moklin before, and they are all excited. I bet if there had been human women around before there'd ha' been hell loose before, too. But now the Moklins just hang around, admiring. There are kids with whiskers like Old Man Bland, and other kids with moustaches—male and female both—and all that sort of stuff. I'm pointing out to Cap'n Haney some kids that bear a remarkable resemblance to him and he's saying, "Well, what do you know!" when Inspector Caldwell comes back.

"What are you waiting for, Captain?" she asks, frosty.

"The ship usual grounds a few hours," I explain. "These Moklins are such friendly critters we figure it makes goodwill for the trading post for the crew to be friendly with 'em."

"I doubt," says Inspector Caldwell, her voice dripping icicles, "that I shall advise that that custom be continued."

Cap'n Haney shrugs his shoulders and goes off. So I know Inspector Caldwell is high up in the Company. She ain't old, not much over twenty, I'd say, but the Caldwell family practically owns the Company, and all the nephews and cousins and so on get put into a special school so they can go to work in the family firm. They get taught pretty good, and most of 'em really rate the better jobs they get. Anyhow, there's plenty of good jobs. The Company runs twenty or thirty star

clusters and it's run pretty tight. Bein' a Caldwell means you get breaks, but you got to live up to them. It's no skin off my nose. What do I care?

Cap'n Haney almost has to fight his way through the Moklins who want to give him flowers and fruits and such. Moklins are sure crazy about humans! He gets to the entry-port and goes in, and the door closes and the Moklins pull back. Then the *Palmyra* booms. The ground-repulsor unit is on. She heaves up, like she was grunting, and goes bulging up into the air, and the humming gets deeper and deeper, and fainter and fainter—and suddenly there's a whistle and she's gone. It's all very normal. Nobody would guess that this is the last time but one a human ship will ever lift off Moklin!

Inspector Caldwell taps her foot, icy.

"When will you send for Mr. Brooks?" she demands.

"Right away," I says. "Deeth—"

"I sent a runner for him, ma'am," says Deeth. "If he was in hearing of the ship's landing, he may be on the way here now."

He bows and goes in the trade room. There are Moklins that came to see the ship land and now have tramped over to do some trading. Inspector Caldwell jumps.

"Wh-what's that?" she asks, tense.

The trees that crowded off the field to make room for the *Palmyra* are waddling back. I realize for the first time that it might look funny to somebody just landed on Moklin. They are regular-looking trees, in a way. They got bark and branches and so on. Only they can put their roots down into holes they make in the ground, and that's the way they stay mostly. But they can move. Wild ones, when there's a water shortage or they get too crowded or mad with each other, they pull up their roots and go waddling around looking for a better place to take root in. The trees on our landing field have learned that every so often a ship is going to land and they've got to make room for it. But now the ship is gone, and they're lurching back to their places. But the younger ones are waddling faster than the big fellas and taking the best places, and the old grunting fellas are waving their branches indignant and puffing after them mad as hell.

I explain what is happening. Inspector Caldwell just stares. Then Sally comes lumbering up. I got a friendly feeling for Sally. She's pretty old—her trunk is all of three feet thick—but she always puts out a branch to shadow my window in the morning, and I never let any other tree take her place.

She comes groaning up and uncoils her roots, and sticks them down one by one into the holes she'd left, and sort of scrunches down in place and looks peaceful.

"Aren't they—dangerous?" asks Inspector Caldwell, uneasy.

"Not a bit," I says. "Things can change on Moklin. They don't have to fight. Things fight other places because they can't change and they're getting crowded, and that's the only way they can meet competition. But there's a special kind of evolution on Moklin. Things can pick out what they want their young ones to be, and they are that way. So evolution has worked out a pretty co-operative flora and fauna. It's a nice place to live."

She sniffs.

"What about that other trading post?" she says, sharp. "Who's back of it? The Company is supposed to have exclusive trading rights here. Who's trespassing?"

"Brooks is trying to find out," I says. "They got a good, complete line of trade goods, but the Moklins always say the men have gone off somewhere. We ain't seen any of them."

"Hmmmmm," says the girl, short. *"I'll* see them! We can't have competition in our exclusive territory! The rest of Mr. Brooks' reports—" She stops. Then she says, "That clerk of yours reminds me of someone I know."

"He's a Moklin," I explain, "but he looks like a fella named Casey. He's Area Director over on Khatim Two now, but he used to be here, and Deeth is the spit and image of him."

"Outrageous!" says Inspector Caldwell. She seethes.

There's a couple of trees pushing hard at each other. They are fighting, tree-fashion, for a specially good place. And there's others waddling around, mad as hell, because somebody else beat them to the spots they liked. I watch 'em. Then I grin, because a coupla young trees duck under the fighting big ones and set their roots down in the place the big trees was fighting over.

"I don't like your attitude!" says Inspector Caldwell, furious.

She goes stamping into the post, leaving me puzzled. I don't get—not then—what's in her mind.

That afternoon Brooks comes back, marching ahead of a pack of woods-Moklins with greenish skins and saucer eyes that've been guiding him around. He's a good-looking

kind of fella, Brooks is, with a good build and a solid jaw. When he comes out of the woods on the landing field—the trees are all settled down by then—he's striding impatient and loose-jointed. With the woods-Moklins trailing him he looks plenty dramatic. He looks like a visireel picture of a explorer on some unknown planet, coming back from the dark and perilous forests, followed by the strange natives who do not yet know whether this visitor from outer space is a god or what. You know the stuff. But I see Inspector Caldwell take a good look at him, and I see her eyes widen. She looks like he is a shock, and not a painful one.

He blinks when he sees her. He grunts, "What's this? A she-Moklin?"

Inspector Caldwell draws herself up to her full five-foot-three. She bristles. I say quick, "This here is Inspector Caldwell that the *Palmyra* dumped off here today. Uh—Inspector, this is Brooks, the Head Trader."

They shake hands. He looks at her, and says, "I'd lost hope my reports would ever get any attention paid to them! You've come to check my report that the trading post on Moklin has to be abandoned?"

"I have not!" says Inspector Caldwell, sharp. "That's absurd! This post is profitable and the natives are friendly, and the trade should continue to increase. The Board is even considering the introduction of special crops—"

That strikes me as a bright idea. I'd like to see what would happen if Moklins started cultivating new kinds of plants. It would be a thing to watch—with regular Moklin plants seeing strangers getting good growing places and special attention! I can't even guess what'd happen, but I want to watch!

"What I want to ask right off," says Inspector Caldwell, fierce, "is why you have allowed a competitive trading post to be established, why you did not report it sooner and why you haven't identified the company back of it?"

Brooks stares at her. He gets mad.

"Hell!" he says. "My reports cover all that! Haven't you read them?"

"Of course not!" says Inspector Caldwell. "I was given an outline of the situation here and told to investigate and correct it."

"Oh!" says Brooks. "That's it!"

Then he looks like he's swallowing naughty words. It is funny to see them look at each other, both of them looking

like they are seeing something that interests them plenty but fairly throwing off sparks just the same.

"If you'll show me samples of their trade goods," says Inspector Caldwell, arrogant "—and I hope you can do that much—I'll identify the trading company handling them!"

He grins at her, not being amused. He leads the way to the inside of the trading post. He brings out the stuff we've had some of our Moklins go over and buy for us. Brooks dumps the trade items on a table and stands back to see what she'll make of them, grinning with the same lack of mirth. She picks up a visireel shower.

"Mmmm," she says, scornful. "Not very good quality. It's —" Then she stops. She picks up a forest-knife. "This," she says, "is a product of—" Then she stops again. She picks up some cloth and fingers it. She steams. "I see!" she says, angry. "Because we have been on this planet so long and the Moklins are used to our goods the people of the other trading post forge them! They duplicate them! Do they cut prices?"

"Fifty per cent," says Brooks.

I chime in, "But we ain't lost so much trade. Lots of Moklins still trade with us, out of friendship, Friendly folks, these Moklins."

Just then Deeth comes in, looking just like Casey that used to be here on Moklin. He grins at me.

"A girl just brought you a compliment," he says.

"Shucks!" I says. "Send her in and get a present for her."

Deeth goes out. Inspector Caldwell hasn't noticed. She's seething over that other trading company copying our trade goods and underselling us on a planet we're supposed to have exclusive. Brooks looks at her grim.

"I shall look over their post," she says fierce, "and if they want a trade war they'll get one. We can cut prices if we need to!"

Brooks just seems to be steaming on his own—maybe because she hasn't read his reports. But just then a Moklin girl comes in. Not bad-looking, either. You'd know she was Moklin—she ain't as convincing human as Deeth is, say—but she looks pretty human, at that. She giggles at me.

"Compliment," she says, and shows me what she's carrying.

I look. It's a Moklin kid, just about brand-new. And it has my shape ears, and its nose looks like somebody had stepped on it—my nose is that way—and it looks like a

very small-sized edition of me. I chuck it under the chin and say, "Kitchy-coo!" It gurgles at me. I feel embarrassed.

"What's your name?" I ask the girl.

She tells me. I don't remember it, and I don't remember ever seeing her, but she's paid me a compliment, all right —Moklin-style.

"Mighty nice!" I say. "Cute as all get-out. I hope he grows up to have more sense than I got, though." Then Deeth comes in with a armload of trade stuff like Old Man Bland gave to the first Moklin kid that was born with long whiskers like his, and I say, "Thanks for the compliment. I am greatly honored."

She takes the stuff and giggles again and goes out. The kid beams at me over her shoulder and waves its fist. Mighty humanlike. A right cute kid, any way you look at it.

Then I hear a noise. Inspector Caldwell is regarding me with loathing in her eyes.

"Did you say they were friendly creatures?" she asks, bitter. "I think affectionate would be a better word! *Oh-h-h-h-h-h!*" Her voice shakes. "You are going to be transferred out of here the instant the *Palmyra* gets back!"

"What's the matter?" I ask, surprised. "She paid me a compliment and I gave her a present. It's a custom. She's satisfied! I never saw her before that I remember!"

Then Brooks begins to sputter, and then he snickers, and all of a sudden he's howling with laughter. He is laughing at Inspector Caldwell, and she gets mad as hell. Then I get it, and I snort. Then I hoot and holler. It gets funnier when she gets madder still. She near blows up from being mad!

We must've looked crazy, the two of us there in the post, just hollerin' with laughter while she got furiouser and furiouser. Presently I laid down on the floor to laugh more comfortable. You see, she didn't get a bit of what I'd told her about there being a special kind of evolution on Moklin. The more disgusted and furious she looked at me, the harder I had to laugh. I couldn't help it.

When we set out for the other trading post next day the atmosphere wasn't what you'd call exactly cordial. There was just the inspector and me, with Deeth and a couple of other Moklins for the look of things. She had on a green forest-suit, and with her red hair she sure looked good! But she'd looked at me cold when Brooks said I'd take her over

to the other post, and she didn't say a word the first mile or two.

We went on, and presently Deeth and the others got ahead so they wouldn't hear what she said. And she says indignant, "I must say Mr. Brooks isn't very co-operative! Why didn't he come with me? Is he afraid of the men at the other post?"

"Not him," I says. "He's a good fella. But you got authority over him and you ain't read his reports."

"If I have got authority," she says sharp, "I assure you I'm competent."

"I don't doubt it," I says. "If you wasn't cute he wouldn't care. But a man don't want a good-looking woman giving him orders. He wants to give them to her. A homely woman it don't matter."

She tosses her head, but it don't exactly displease her. Then she says, "What's in the reports that I should have read?"

"I don't know," I says. "But he's been sweating over them. It makes him mad nobody bothered to read 'em."

"Maybe," she guesses, "it was what I need to know about this other trading post. What do you know about it, Mr. Brinkley?"

I tell her what Deeth has told Brooks. Brooks found out about it because one day some Moklins come in to trade and ask friendly why we charge so much for this and that. Deeth told 'em we'd always charged that, and they says the other trading post sells things cheaper, and Deeth says what trading post? So they clam up and tell him there's another human trading post that sells the same kinda things we do, only cheaper. But that's all they'll say. So Brooks tells Deeth to find out, and he scouts around and comes back. There is another trading post only fifteen miles away, and it is selling stuff just like ours. And it charges only half price. Deeth didn't see the men—just the Moklin clerks. We ain't been able to see the men either."

"Why haven't you seen the men?"

"Every time Brooks or me went over," I said, "the Moklins they got working for them say the men are off somewhere. Maybe they're starting some more posts. We wrote 'em a note, asking what the hell they mean, but they never answered it. Of course we ain't seen their books or their living quarters—"

"You could find out plenty by a glimpse at their books!"

she snaps. "Why haven't you just marched in and got high-handed and made the Moklins show you what you want to know—since the men were away."

"Because," I says, "Moklins imitate humans! If we start burglary they'll start it, too. We can't set a example of burglary, mayhem, breaking and entering, manslaughter, or bigamy, or those Moklins will set up in the same business."

"Bigamy!" she says, sardonic. "Ha! If you're trying to make me think you've got enough moral sense to think of bigamy, even—"

I get a little bit mad. Brooks and me, we've explained to her, careful, how it is admiration *and* the way evolution works on Moklin that makes Moklin kids get born with long whiskers and that the compliment the Moklin girl had paid me was just exactly that. But she hadn't believed a word of it. So I says, "Miss Caldwell," I says, "Brooks and me told you the facts. We tried to tell them delicate, to spare your feelings. Now if you'll try to spare mine, I'll thank you."

"If you mean your finer feelings," she says, sarcastic. "I'll try to spare them as soon as I find some!"

Then I shut up. There's no use trying to argue with a woman. We tramp on through the forest without a word. Presently we come on a nest-bush. It's a pretty big one. There are a coupla dozen nests on it, from the little-bitty bud ones no bigger than your fist to the big ripe ones lined with soft stuff that have busted open and have got cacklebirds housekeeping in them now. And there are two cacklebirds setting on a branch by the nest that is big enough to open up and have eggs laid in it, only it ain't. The cacklebirds are making noises like they are cussing it and telling it to hurry up and open, because they are in a hurry.

"That's a nest-bush," I says. "It grows nests for the cacklebirds. They—uh—fertilize the ground around it, and they're sloppy feeders and drop a lot of stuff that rots and is fertilizer, too. The nest-bush and the cacklebirds kinda co-operate."

She tosses that red head of hers and stamps on, not saying a word. So we get to the other trading post. And there she gets one of these slow-burning, long-lasting mads on that fill a guy like me with awe. There's only Moklins at the other trading post. They say the humans are off somewhere. They look at her admiring and polite. They show her their stock. It is practically identical with ours—only they admit

that they're sold out of some items because their prices are low. They act glad to see her, and they act most respectful and pleased. But she don't learn a thing about where their stuff comes from or what company is horning in on Moklin trade. And she looks at their head clerk and she burns and burns and burns. . . .

When we get back Brooks is sweating over memorandums he has made, getting another report ready for the next Company ship. Inspector Caldwell marches into the trade room and gives orders in a controlled, venomous voice. Then she marches in on Brooks.

"I have just ordered the Moklin sales-force to cut the price on all items on sale by seventy-five per cent," she says, her voice trembling a little with fury. "I have also ordered the credit given for Moklin trade goods to be doubled. They want a trade war? They'll get it!"

But she's madder than any business affair would make her. Brooks says, tired, "I'd like to show you some facts. I've been over every inch of territory in thirty miles, looking for a place where a ship could land for that other post. There isn't any. Does that mean anything to you?"

"The post is there, isn't it?" she says. "And they have trade goods, haven't they?" she says. "And we have exclusive trading-rights on Moklin, haven't we? We'll drive them out of business!"

But she is a lot madder than business would account for. Brooks says, very weary, "There's a whole planet where they coulda put another trading post. They coulda set up shop on the other hemisphere and charged any price they pleased. But they set up shop right next to us! Does that make sense?"

"Setting up close," she says. "would furnish them with customers already used to human trade goods. And it furnished them with Moklins trained to be interpreters and clerks! And—" Then it come out, what she's raging, boiling, steaming, burning up about. "And," she says, furious, "it furnished them with a Moklin head clerk who is a very handsome young man, Mr. Brooks! He not only resembles you in every feature, but he even has a good many of your mannerisms! You should be very proud!"

Then she slams out of the room. Brooks blinks.

"She won't believe anything," he says, sour, "except

that only man is vile. Is that true about a Moklin who looks like me?"

I nod. He swears. He says, "Funny his folks never showed him to me for a compliment-present." Then he stares at me, hard. "How good is the likeness?"

"If he'd been wearing your clothes," I tell him, truthful, "I'd ha' sworn it was you. Humanest-looking Moklin I ever saw!"

Then Brooks—slow, very slow—turns white.

"Something comes into my mind," he says. "Do you remember the time you went off with Deeth and his folks, hunting? That was the time a Moklin got killed, remember? You were wearing guest-garments, weren't you?"

I feel queer inside. But I nod. Guest-garments, for Moklins, are like the best bedroom and the best part of the chicken among humans. And a Moklin hunting party is something. They go hunting *garlikthos*, which you might as well call dragons, because they've got scales and they fly and they are tough babies. The way to hunt them is you take along some cacklebirds that ain't nesting—they are no good for anything while they're honeymooning—and the cacklebirds go flapping around until a *garlikthos* comes after them, and they go jet-streakin' to where the hunters are, cacklin' a blue streak to say, "Here I come, boys! Hold everything until I get past!" and the *garlikthos* dives after them and the hunters get it as it dives. Then you give the cacklebirds its innards, and they set around and eat, cackling to each other zestful like they're bragging about the other times they done the same thing, only better.

"You were wearing guest-garments?" repeats Brooks, grim.

I feel very queer inside, but I nod again. Moklin guest-garments are mighty easy on the skin and feel mighty good. They ain't exactly practical hunting clothes, but the Moklins feel bad if a human that's their guest don't wear 'em. And of course he has to shed his human clothes to do so.

"What's the idea?" I want to know. But I feel pretty unhappy inside.

"You didn't come back for one day in the middle of the hunt, after tobacco and a bath?"

"No," I says, beginning to get rattled. "We were way over at the Thunlib Hills. We buried the dead Moklin over there and had a hell of a time building a tomb over him. Why?"

"During that week," says Brooks, grim, "and while you were off wearing Moklin guest-garments, you came back—or

somebody did, wearing your clothes—and got some tobacco and passed the time of day and went off again. Joe," he says, "just like there's a Moklin you tell me could pass for me, there's one that could pass for you. In fact, he did."

I get panicky.

"But—what'd he do that for?" I want to know. "He didn't steal anything! Would he ha' done it just to brag to the other Moklins that he fooled you?"

"He might," says Brooks, very grim, "have been checking to see if he could fool me. Or Cap'n Haney of the *Palmyra*. Or—"

He looks at me grim. I feel myself going white. This could mean one hell of a mess!

"I haven't told you before," says Brooks, "but I've been guessing at something like this. Moklins like to be human, and they get human kids—kids that look human, anyways. Maybe they can want to be smart like humans, and they are." He tries to grin, and can't. "That trading post looked fishy to me right at the start. They're practicin' with that. It shouldn't be there at all, but it is. You see?"

I feel weak and sick all over. This is a hell of a thing! But I say quick, "If you mean they got Moklins that could pass for you and me, and they figure they'll bump us off and take our places—I don't believe that! Moklins like humans! They wouldn't harm humans for anything!"

Brooks don't pay any attention. He says harsh, "I've been trying to persuade the Company, that we've got to get out of here, and fast. And they send Inspector Caldwell, who's not only female, but a redhead to boot! And all they think about is a competitive trading post! And all she sees is that we're a bunch of lascivious scoundrels, and since she's a woman there's nothing that'll convince her otherwise!"

Then something hits me. It looks hopeful. I say, "She's the first human woman to land on Moklin. And she has got red hair. It's the first red hair the Moklins ever saw. Have we got time?"

He figures, fast. Then he says, "With luck—it'd oughta turn up! We got it!" And then his expression sort of softens. "If that happens—poor kid! She's going to take it hard! Women hate to be wrong. Especially redheads! But that might be the saving of—of humanity, when you think of it."

I blink at him. He says, fierce, "Look! *I'm* no Moklin! You know that! But if there's a Moklin that looks enough like me to take my place . . . You see? We got to think of In-

spector Caldwell, anyhow! If you ever see me cross my fingers, you wiggle your little finger. Then I know it's you. And the other way about. Get it? You swear you'll watch over Inspector Caldwell?"

"Sure!" I says. "Of course! Uh—"

I wiggle my little finger. He crosses his. It's a kinda signal nobody but us two would know. I feel a lot better.

Brooks goes off, grim, next morning, to visit the other trading post and see the Moklin that looks so much like him. Inspector Caldwell goes along, fierce, and I'm guessing it's to see the fireworks when Brooks sees his Moklin double that she thinks is more than a fortuitous coincidence. Which she is right, only not in the way she thinks. Before they go, Brooks crosses his fingers and looks at me significant. I wiggle my little finger back at him. They go off.

I set down in the shade of Sally and try to think things out. I am all churned up inside, and scared as hell. It's near two weeks to landing time, when the old *Palmyra* ought to come bulging down out of the sky with a load of new trade goods. I think wistful about how swell everything has been on Moklin up to now, and how Moklins admire humans, and how friendly everything has been, and how it's a great compliment for Moklins to want to be like humans, and to get like them, and how no Moklin would ever dream of hurting a human and how they imitate humans joyous and reverent and happy. Nice people, Moklins. But—

The end of things is in sight. Liking humans has made Moklins smart, but now there's been a slip-up. Moklins show humans kids that look like them. That's a compliment. But no human ever sees a Moklin, normal, that has grown up and looks so much like him that nobody could tell 'em apart. That ain't scheming. It's just that Moklins like humans, but they're scared the humans might not like to see themselves in a sort of Moklin mirror. So they keep that sort of thing a secret—like children keep secrets from grownups. Moklins are a lot like kids. You can't help liking 'em. But if you are human you get scared at the idea of Moklins passing for humans and able to have their kids turn out smart if they want them to—or any other way. And a human can get plenty panicky if he thinks what would happen if Moklins got to passing for humans among humans, and they wanted their kids to have top-grade brains, and top-grade talents, and so on. . . .

In one way, of course, there wouldn't be any harm in it. Moklins *like* humans. But humans wouldn't want Moklins-passing-for-humans to have the best brains in the Galaxy, and Moklin-girls-passing-for-human to be the prettiest in the Galaxy and have all the visireel-star jobs and so on. Moklins as administrators and big businessmen wouldn't do any harm. In some ways, maybe, they'd run things better than humans. They are swell folks. But humans wouldn't like it!

I sweat, setting there. I can see the whole picture. Brooks is worrying about Moklins loose among humans, outsmarting them as their kids grow up, being the big politicians, the bosses, the—everything humans want to be themselves. Just thinking about it is enough to make any human feel like he's going nuts. But Brooks is also worrying about Inspector Caldwell, who is five foot three and redheaded and cute as a bug's ear and riding confident for a mighty bad fall.

They come back from the trip to the other trading post. Inspector Caldwell is baffled and mad. Brooks is sweating and scared. He slips me the crossed-finger signal and I wiggle my little finger back at him—just so I'll know he didn't get substituted for without Inspector Caldwell knowing it, and so he knows nothing happened to me while he was gone. They didn't see the Moklin that looks like Brooks. They didn't get a bit of information we didn't have before—which is just about none at all.

Things go on. Brooks and me, we are sweating it out until the *Palmyra* lets down out of the sky again, and meanwhile he is praying for Inspector Caldwell to get her ears pinned back so proper steps can be taken, and every morning he crosses his fingers at me, and I wiggle my little finger back at him. . . . And he watches over Inspector Caldwell tender.

The other trading post goes on placid. They sell their stuff at half what we sell ours for, so on Inspector Caldwell's orders we sell ours at half what they sell theirs for. So they sell theirs for half what we sell ours for so we sell ours for half what they sell theirs for. And so on. Meanwhile we sweat. And three days before the *Palmyra* is due our goods are marked at just exactly one per cent of what they was marked a month before, and the other trading post is selling them at half that. It looks like we are gonna have to pay a bonus to Moklins to take 'em away in order to compete with the other trading post.

Otherwise everything looks normal on the surface. Moklins hang around as usual, friendly and admiring. They'll hang

around a coupla days just to get a look at Inspector Caldwell, and they are admiring and respectful. Brooks looks grim. He is head over heels crazy about her now, and she knows it, and she rides him hard. She snaps at him, and he answers her patient and tender—because he knows what he hopes is going to happen, when she is gonna need him to comfort her. She has about wiped out our stock, throwing bargain sales. Our shelves are about bare. But the other trading post still has plenty of stock.

"Mr. Brooks," says Inspector Caldwell, bitter, at breakfast, "we'll have to take most of the *Palmyra's* cargo to fill up our inventory!"

"Maybe," he says, tender, "and maybe not."

"But we've—got to drive that other post out of business!" she says, desperate. Then she breaks down. "This—this is my first independent assignment! I've—got to handle it successfully!"

He hesitates. But just then Deeth comes in. He beams friendly at Inspector Caldwell. "A compliment for you, ma'am. Three of them."

She goggles at him. Brooks says, gentle, "It's all right. Deeth, show them in and get some presents."

Inspector Caldwell says incredulous, "But—but—but—"

"Don't be angry," says Brooks, tender. "They mean it as a compliment. It is!"

Three Moklin girls come in, giggling. They are not bad-looking at all. They look as human as Deeth, but one of them has a long, droopy moustache like a mate of the *Palmyra.* That's because they hadn't ever seen a human woman before Inspector Caldwell come along. They sure have admired her, though! And Moklin kids come along fast. Very fast.

They show her what they are holding so proud and happy in their arms. They have got three little Moklin kids, one apiece. And every one of them has red hair, just like Inspector Caldwell, and every one of them is a girl that is the spit and image of her. You would swear they are human babies, and you'd swear they are hers. But of course they ain't. They make kid noises and wave their little fists.

Inspector Caldwell is just plain paralyzed. She stares at them, and goes red as fire and white as chalk, and she stammers, and Brooks has to do the honors. He admires the kids extravagant, and the Moklin girls giggle, and take the compliment-presents Deeth brings in, and go out happy.

When the door closes, Inspector Caldwell wilts.

"Oh-h-h-h!" she wails. "It's true! You didn't—you haven't —they can have their babies look like anybody they want!"

Brooks puts his arms around her, and she begins to cry against his shoulder. He pats her and says, "They've got a queer sort of evolution on Moklin, darling. Babies here inherit desired characteristics. Not acquired characteristics, but desired ones. And what could be more desirable than you?"

I am blinking at them. He says to me, cold, "Will you kindly get the hell out of here and stay out?"

I come to. I says, "Just one precaution."

I wiggle my little finger. He crosses his fingers at me. He scowls.

"Then," I says, "since there's no chance of a mistake, I'll leave you two together."

And I do.

The *Palmyra* comes booming down out of the sky two days later. We are all packed up. Inspector Caldwell is shaky, on the porch of the post, when Moklins come hollering and waving friendly over from the landing field pulling a freight truck with Cap'n Haney on it. I see other festive groups around members of the crew that—this being a scheduled stop—have been given shore leave for a coupla hours to visit their friends.

"I've got the usual cargo—" begins Cap'n Haney.

"Don't discharge it," says Inspector Caldwell, firm. "We are abandoning this post. I have authority, and Mr. Brooks has convinced me of the necessity for it. If you'll get our baggage to the ship—"

He gapes at her.

"The Company don't like to give in to competition—"

"There isn't any competition," says Inspector Caldwell. She gulps. "Darling, you tell him!"

She is referring to Brooks. He says, lucid, "She's right, Captain. The other trading post is purely a Moklin enterprise. They like to do everything that humans do. Since humans were running a trading post, they opened one, too. They bought goods from us and pretended to sell them at half price, and we cut our prices, and they bought more goods from us and pretended to sell at half the new prices. . . ." He said painful, "Some Moklin or other must've thought it would be nice to be a smart businessman, so his kids were smart businessmen. Too smart! We close up this post before Moklins think of other things . . ."

He means, of course, what would happen if Moklins got loose from their home planet and passed as humans and their kids took over human civilization. Human nature couldn't take that! But it is something to be passed on to the high brass, and not told around general.

"Better sound the emergency recall signal," says Inspector Caldwell, brisk.

We go over to the ship and the *Palmyra* lets go that wailing siren that'll carry twenty miles. Any crew-member in hearing is gonna beat it back to the ship full speed. They come running from every which way, where they been visiting their Moklin friends. And then, all of a sudden, here comes a fella wearing Moklin guest-garments, yelling, "Hey! Wait! I ain't got my clothes—"

And then there is what you might call a dead silence. Because lined up there for check-off, there is another guy that came running at the recall signal, and he is wearing human clothes, and you can see that him and the guy in Moklin guest-garments are just exactly alike. Twins. Identical. The spit and image of each other. And it is perfectly plain that one of them is a Moklin. But which?

It looks tough. Cap'n Haney's eyes start to pop out of his head. But then the guy in human clothes grins and says, "Okay," he says, humorous. "I'm a Moklin. But us Moklins like humans so much I thought it would be nice to take a trip and see more humans."

He takes it as a joke on him. He talks English as good as anybody. I don't know how anybody woulda told which was the human guy and which one the Moklin, but this Moklin grins and steps down, and the other Moklins admire him enormous for passing as human among humans.

We get away from there so fast he keeps the human uniform.

Moklin was the first planet that humans ever got off of, moving fast, breathing hard and sweating copious. It's one of those things that humans just can't take. Not that there's anything wrong with Moklins. They' swell folks. They like humans. But humans just can't take the idea of Moklins passing for human and being all the things humans want to be themselves. But I think it's worked out all right. Maybe, anyhow. I'll find out pretty soon.

I've been waiting till I could save up some money. Inspector Caldwell and Brooks got married, and they went off to a

post on Briarius Four—a swell place for a honeymoon if there ever was one—and I guess they are living happy ever after. Me, I went to the new job the Company assigned me —telling me stern not to talk about Moklin, which I didn't —and the Space Patrol puts out a order that no human ship is to land on Moklin for any reason whatsoever and everything is dogged down tight and all serene.

But I've been saving money and worrying. I keep thinking of those three Moklin kids that Inspector Caldwell knows she ain't the father of. I worry about those kids. I hope nothing's happened to them. Moklin kids grow up fast. They'll be just about grown-up now. And I hope—

I'll tell you. I've bought me a little private space cruiser, small but good. I'm shoving off for Moklin next week. If one of those three ain't married, I'm going to marry her, Moklin-style, and bring her out to a human-colony planet. We'll have some kids. I know just what I want my kids to be like. They'll have plenty of brains—top-level brains—and the girls will be good-looking—boy! And talented! My kids will go places!

But besides that, I've got to bring some other Moklins out and start them to passing for human, too. Because my kids are going to have to have other Moklins to marry, ain't they? It's not that I don't like humans! I do! If the fella I look like—Joe Brinkley—hadn't got killed accidental on that hunting trip with Deeth, I never woulda took his place and been Joe Brinkley myself, fooling Brooks and Inspector Caldwell and everybody into thinking I was human same as them.

But you can't blame me for wanting to live among humans, can you? Wouldn't you, if you was a Moklin?

The Castaway

The fireball passed over Tateville about nine o'clock at night. Ben Lyon had closed up the newspaper office and was walking home, with things arranged so he could go off on a fishing trip in the morning. A cow was lowing somewhere, and there were other noises normal to the little town. Away in the night somebody was singing—with tall mountains all about Tateville didn't get good radio reception, and was mercifully so far free of television—and an ancient car labored valiantly to climb some distant hill.

He reached the corner where he should turn to his boardinghouse. He stopped and looked and listened. There is a feeling about living in a small town. It isn't just a place, but *this* place. Not just a town, but *this* town. The noises were not just noises, but So-and-so's dog barking, or Mrs. Something's daughter Kate shouting cheerfully to her deaf grandfather, or So-and-so working on the garage he was building by lantern-light. The mountains to the west and south and north weren't impersonal. They had their names and outlines and variegated look at different seasons. Even the stars seemed like very particular stars, individual to this place.

Ben lifted his eyes to look at them.

The fireball went over.

It was a bright spot of flame with a long burning tail behind it, moving deliberately from west to east. It was much too bright to be an aeroplane's light. The trailing tail of fire proved that it wasn't a man-made thing. It rolled across the roof of stars, somehow steadily, somehow solidly, faster than any plane could move, and yet not darting to extinction like an ordinary shooting star. Ben Lyon watched it interestedly. It should be an extra-big meteor—a big hunk of stone or metal from somewhere between the stars—which packed air before it and raised it to incandescence as it

rushed across the sky. Being big, it would be visible at a greater height than small shooting stars, and so would seem to move more slowly.

He watched it all the way across the sky. He moved two steps to keep it in view past the fir tree at the corner. It went on like an express train, away past the nearer mountains to the east. He thought it was slowing, but he could not be sure. When the mountaintops hid it it was still ploughing its way onward through the night. Once he thought it brightened for half a second and then went back to its steady glare. But he wasn't certain. It disappeared.

Then, long, long seconds after it had passed, he heard a whispering noise that seemed to come from the west and pass overhead and die away to the east. It wasn't loud. It sounded like it might be the ghost of something following after the fireball. But it was the noise the thing had made up where the air was vastly thin. It had taken so long to get down to the ground, just as a steamer's wake may not reach shore until the steamer has gone on out of sight.

Ben looked at his watch. 9:06. He'd leave an item about it to be run in the newspaper while he was off fishing in the mountains. He went comfortably on to his boardinghouse, went up to his room and got ready for bed. He was all packed for the fishing trip. He wondered mildly about the fireball. Sometimes they exploded into two or three parts. Sometimes they dwindled and burned out. Sometimes they fell to earth.

There were not many people in the mountains to the east. If the fireball did reach ground it was unlikely to be seen. It would land unnoticed, and vegetation would grow over it, and if it was metal it would rust away and if stone it would crumble, and the thing that had come so many thousands of millions of millions of miles to Earth would be indistinguishable from any other rock. Its origin and adventures would never be guessed at.

Ben hadn't the faintest idea that the fireball was unusual in any way, or that its coming would have any other consequences than those of an ordinary shooting star—which was none at all.

In the morning he had to wait for the bus on which the man who would run the newspaper in his absence would arrive. He showed his substitute the few things needful and read the news of the great world in the newspapers brought by the bus. He discovered that the fireball wasn't even Tateville's private phenomenon, but had been watched all the

way across the state before passing overhead here. It had flamed along a four-hundred-mile path—sometimes brighter and sometimes dimmer—before passing on into the mountains. The professor of astronomy at the University had been queried, and he pointed out that it had approached Earth at a very shallow angle, as witnessed by its long visible flight. Perhaps, he suggested, it had merely hit Earth's atmosphere a glancing blow and had bounced on out into space, and was now speeding on through emptiness again to continue its travels for some thousands of millions of years to come.

Ben left a memo for an item in the Tateville *Record* and went on out of town, riding the horse that was his principal extravagance. Fishing was both a reason and an excuse for long camping trips among the mountains. He'd stop at Tom Hartle's very tiny ranch in a valley a day's ride away and pick up Tom, and the two of them would start off. There'd be a pack horse, and fly rods in the back, and there were places in the wilds where golden mountain trout were to be found, and there was a certain lake where fighting bass waited. He thought of such things as he rode out of town into apparent wilderness. He and Tom had been in the war together, and they didn't talk about it, but they did share the outlook of a common experience and a mutual distrust of civilized life. Ben felt an enormous restfulness come over him as the last sign of civilization disappeared behind him.

He traveled at leisure, and by a way which avoided even the scattered habitations of the wilderness. When he reached Tom's place it was already dark, but he had stopped before sunset, and a string of speckled beauties hung from his saddlebow.

Tom wasn't at the ranch. There was nobody at all in sight or hearing about the ranch house. But Ben made himself at home, cooked the trout, feasted happily and afterward sat and smoked comfortably on the ranch-house porch. The horses in the corral made noises from time to time. Tom Hartle and only two hands ran this very small spread in the mountains, and it was utterly peaceful here. To sit on the dark porch and know complete stillness felt very good to a man who'd had his fill of civilization during wartime.

There were sudden snortings at the corral. There was a pounding of hoofs. The horses were disturbed. They acted frightened. Ben listened. Of course nothing dangerous to a horse would come actually to the ranch corral. Of course!

But the stirring increased. It sounded panicky. There was the sound of kicking.

He got a flashlight and rifle and went down to see. The horses were sweating and frightened. He went around the outside of the corral fence, using the flashlight and looking for tracks. He found nothing.

He stayed with the horses until they quieted down. Then he went back to the house. He settled comfortably in his chair again. He struck a match and relighted his pipe. Tom and the hands would be back presently. If they'd expected to be gone long Tom would have left a note for him.

Quietness. Stillness. Peace—with innumerable tiny sounds in the starlight. Ben smoked and deliberately soaked himself in tranquillity.

A voice in the darkness said, "Hello."

"Hi," said Ben cheerfully. "Tom?"

There was a distinct pause. Then the voice said, "No, not Tom. Who're you?"

Ben grunted. In five words the voice had become wholly familiar. It was whiskered, ancient Stub Evans, so wholly worthless that nobody else would hire him even for his keep. But Tom Hartle paid him carefully calculated wages that let him get drunk once a month but not stay drunk enough to harm him.

"Hello, Stub," said Ben. "This is Ben. Come up and set."

Again a pause. Then the voice said, "I'm not Stub."

But it was Stub's voice. Unquestionably.

"Whoever you are," said Ben, "come up and set a while. Don't stay out there in the dark. Where's Tom?"

The voice did not answer. It was curiously unnatural. People don't act that way. Ben felt a peculiar unease. For some reason he picked up the flashlight he'd found for his trip to the corral. He turned it on. He heard an abrupt movement. It was as if Stub had made a frightened, panicky dash out of possible range of the light-beam. And when Ben swept the light around he did not see Stub or anybody else.

"What's the trouble, Stub?" he demanded. "What are you hiding for?"

A long pause. Then Stub's voice said, "I've got my reasons. Put out the light. I want to ask a question."

Ben got up. He felt queer. He found that he'd picked up the rifle he'd carried down to the corral. But he snapped off the light. He was distinctly, unreasonably uneasy.

"Well?" he said. "What's the matter? Drunk?"

A very slight pause. Then, "No, I'm not drunk." The intonation of the voice did not match the words. Ben realized that, while it was Stub's voice, in denying drunkenness it did not convey Stub's indignation at such a question. "I want to ask you if—" There was another pause. "It is hard to say. If you see a very strange thing will you kill it?"

Ben found the hairs at the back of his neck standing up. He'd no reason to feel that way, but he did. He grew irritated.

"Stop it, Stub!" he said impatiently. "Come up on the porch or go to hell! I don't feel like playing games!"

Far away, there was a remote, high-pitched yelping. And immediately there was movement in the darkness nearby. Something rustled swiftly away into the night. Ben swore irritably. He snapped on the flashlight, and its dot of light darted here and there. But it showed nothing but the absolutely familiar details of Tom Hartle's ranch-house surroundings. Ben went down from the porch. He heard a rustling a little distance off. He swept the flashlight that way.

He saw a fair-sized something dart behind a rock. It ran on two legs. It was nearly or quite as big as a man. But when one sees a man one knows it. Recognition is a simple matter, not depending on details. But Ben didn't recognize this as a man. The hair at the back of his neck seemed to crawl. Chills ran up and down his spine. But the thing ran out of sight before he could be sure of anything but that it acted and moved like a man but wasn't. It wasn't human.

He was still standing at that one spot, the flashlight beam darting nervously here and there, when Tom Hartle came loping up. Irritated, whining dogs ran with his horse, keeping much too close to the animal's heels. They whimpered from time to time.

"Hiya, Ben," said Tom in the darkness. "Seen anything queer?"

"I'm not sure," said Ben slowly. He wasn't quite willing to believe his eyes. "I'm not at all sure. But I heard something queer. Stub Evans was talking to me from the dark, but he wouldn't come up to the porch— What's the matter?"

"You weren't talking to Stub," said Tom sharply. "He wasn't here! He's been off—"

"But I know his voice," protested Ben. "Only he talked queerly—"

"It wasn't Stub," insisted Tom. "Here he comes now."

Two other horses were coming, more slowly than Tom had

ridden. There was Brick Toohey riding the first horse and leading the second. And slung over the lead horse, hanging limply, his arms and legs swaying with the motion of the horse, was Stub Evans. Ben Lyon gaped at him.

"Got to get him in the house now," said Tom. To Ben he added, "He's asleep. I can't find anything else wrong with him. Can't wake him up. But he's not drunk."

It was completely impossible. The voice Ben had heard was specifically Stub Evans', and no other. But he walked with the led horse to the ranch house, helped unload Stub and helped carry him inside. Stub slept, snoring. His pulse was strong and natural. His breathing was that of a man in the deepest possible natural slumber. He would have passed for dead drunk any day, except that there was no smell of liquor about him. Tom looked down at him, scowling.

"There was a fireball in the sky last night," he said dourly, "and it came down beyond the mountains over yonder." He gestured with his thumb. "We heard the roaring. We went out on the porch. The thing came down out of the air, trailing fire behind it and spitting out fire ahead. We watched it down in the next valley over. Seemed like we heard it hit. There was a grumbling noise afterward. And I'd heard that fireballs or shooting stars were worth a little something. Stub went over to see if he could pick up the shooting-star stuff. He rode over about sunrise and didn't come back. Along about three o'clock we went over to look for him. We found his horse, but no Stub. There was a dozen acres of new-fallen landslide where the fireball had hit. The shock started it sliding down. Stub couldn't find anything in that mess! So we hunted for him. Along about sundown he hollered back to us. We went and found him. He was sound asleep against a tree. He's been asleep ever since, just like he is now."

Ben frowned. He drew a deep breath.

"Seemed funny," added Tom harshly, "that he could call to us and then be so sound asleep when we came to him. It's funnier that he was talking to you when he was slung across his horse, miles away."

Ben said, "I'd've sworn it was Ben—only he wouldn't let me see him. And I—did see something queer."

"The dogs act queer," snapped Tom, "their hackles stand up, and they snarl and bark and yelp, but they won't trail. They've been like that all the way over here. Something that scares them came this way. What was it?"

Ben told his story, uncomfortably.

"Stub's voice spoke to me," he finished doggedly, "whether or not he was with you. Whatever was using his voice wouldn't come to the light, but asked if I saw something queer if I'd kill it. And I—went out and I saw something queer. I think I did. But it wasn't a man."

"Where'd you see it?" asked Tom.

Ben led the way. When he went out of the ranch-house door the dogs were clumped there, whimpering. Ben went through the starlit night with Tom and Brick, and the dogs came with them, but practically underfoot.

The dogs caught a scent and snarled and yelped, but did not go on ahead of the men. They stayed very close.

The party reached the place where Ben had seen something which was not a man as it darted behind a rock. Here the dogs gave tongue to an ululating, panic-stricken uproar in the night. But they would not trail.

Behind the rock where the thing had vanished there was a soft place in the earth and a track there. It was almost large enough to be the track of a man. But it wasn't. None of the four of them had ever seen such a footprint before.

They looked at it in the flashlight's glow. The stars shone down from above the mountains. The night wind was still. There were very, very faint whisperings among the branches of nearby trees. Tom breathed hard.

"You're dead sure it talked to you, Ben?"

"Something did," said Ben. "In Stub's voice. It asked if I'd kill something very strange if I saw it."

There was a pause. A dog sniffed at the track with its tail between its legs. It snarled and bristled and yelped all at once, but it shrank back from the print in the soft earth.

"Remember?" said Tom detachedly. "There was a fireball last night."

A voice spoke abruptly from somewhere overhead. It spoke in the exact tone and pronunciation of Stub Evans, who was now sleeping heavily back in the ranch house. But it could not be Stub himself. Obviously.

"I am a castaway," said the voice from the hillside. "I want to make friends."

But then it couldn't be heard any more. The dogs screamed their hatred of the thing that spoke. There was a tumult of snarls and yelpings and frenzied barkings in the night.

Ben said, "I'm going up there."

He unlimbered the flashlight he had used before. Flicking the light back and forth before him he started to climb

the hillside. The dogs seemed to go crazy. Tom shouted something Ben couldn't make out as he went up the hill. Ben went onward, sweeping the light from side to side, and keeping the rifle that he'd grasped, like Tom when they left the house, ready.

He knew of no movement, but something "plopped" to the ground before him, and instantly there was a flare of such monstrous heat and unbearable brightness that he stopped short without willing it. The flare was blue-white in temperature. He felt its savage heat upon him for an instant. He saw a weed-stalk burst into steam even though the brightness did not envelop it.

But then he could not see anything but the image of the flame in his dazzled eyes. The light died, and he smelled baked earth and shriveled vegetation. He heard Tom shouting, downhill, and the screaming of the dogs. A dogged, obstinate defiance filled him. Something which called itself a castaway had used a weapon of heat and flame to warn him not to approach. It was not a human weapon. He could not face it. But he would not flee from it.

He stood there, bristling, while the dogs screamed and snarled, and while Tom strove to yell above their din. The back of his neck crawled, but he glared with blinded eyes up at the blackness from which the deadly warning flame had come.

A long time later, having given whatever was up on the hillside a dozen chances to kill him if it wished, he went slowly down the hill again.

On the face of it, there was nothing else for him to do. On the face of it, too, there was nothing for the others to do but go back to the ranch house and engage in long and completely useless discussion. It was wasted time and speculation, because Stub Evans woke up abruptly, just about dawn, and told them facts they had not guessed at.

He'd reached the spot where the fireball landed, he said, and saw that its impact had set off a landslide that buried it hopelessly in twelve acres of tumbled ground. He'd been indignant at having the ride for nothing, and he'd dismounted and begun to hunt for possible fragments of the thing from space that might have fallen short of the main body. As he hunted he felt creepy. Chills ran up and down his spine. And suddenly he couldn't move. He was frozen where he stood—paralyzed, while something came up behind him and fumbled at his body and his garments. Presently something cold

touched his temples. Up to this point he had felt the ghastly impotence of a creature fascinated by a snake, except that his helplessness was the more horrible because he could not see the thing that caused it. But when the coldness touched his temples he felt all sensation drain from him. He knew nothing. Nothing whatever. Everything was a blank to him until he waked back in the ranch house. He didn't remember calling to guide Tom and Brick to where he lay sleeping heavily, nor the long ride over his saddle back to the ranch.

He bewilderedly and apprehensively finished his tale just as the dawn light grew bright. Ben became conscious of the light when he realized that the dogs were crowded fearfully close to the door. Now and again they growled, with raised hackles. Sometimes they whined. They stayed close to the house while Tom cooked bacon and flapjacks and made coffee. As the men ate—Ben marveled mildly that mystery did not affect one's appetite—they could be heard very near. Once or twice a dog scratched imploringly at the door.

"Something looks like it's spoiled a bunch of good dogs," said Tom, frowning. "They were good dogs till yesterday. Now they're scared. Ben, what d'you think?"

Ben said briefly, "It said it was a castaway."

"What said it?" demanded Stub.

"The thing that talked like you," said Ben. "The thing that paralyzed you and put something to your temples and apparently learned how to talk from what was in your mind."

Tom growled.

"And used a flame-thrower to warn Ben back."

"Yes," agreed Ben. "Only that wasn't a flame-thrower like we use. Something landed and flared. Call it a flame-grenade, or maybe a heat-bomb. It would stop any creature, I'd say. It stopped me. A nice trick for a castaway to use to defend himself with. It could be a castaway, at that." Then he thought wrily of civilization as he'd seen it, twisted and distorted to the purposes of war. "The Earth would be a desert island, and we'd be savages. We'd be the murderous natives, riding on animals across mountains to the spot where a wrecked—ah—boat had landed, to hunt for survivors of the wreck. A castaway might manage to sight a single one of the natives first, paralyze him, read his mind and learn how to talk to the natives, but he'd be appalled at the violence and brutality of the savage's thoughts. That's you, Stub!"

He grinned at Stub without mirth.

Tom Hartle looked at Ben—hard.

"You think the fireball was something else too?"

Ben said, "There isn't any sensible explanation. The whole business is unreasonable. It might have a fantastic explanation. I just offered one."

"I figured nearly the same thing," said Tom Hartle, slowly. "I'm remembering that the thing said that *it* was a castaway, not that *they* were castaways. Right?"

"Yes."

"Then we've got to find it," said Tom flatly. "If there are creatures that have got spaceships and such, then compared to them we are savages. And if there's a castaway on earth that we humans seems savages to, then he's pretty dangerous. We've got to get him—it."

Stub said plaintively, "What the hell're you talkin' about, Tom?"

"I'm saying that Ben and I aren't going on a fishing trip like we planned," said Tom. "We're going hunting."

Ben felt queer, He said, "After all, if there is a creature—and it is a castaway—it's in a bad fix. It's marooned. And it said it wanted to make friends. . . ."

"I knew a pilot in the Pacific," said Tom curtly. "He was cast away when his plane conked out. He made an island. He made friends with the natives. Sure! He wanted help in signaling for a rescue. He wanted help to make a boat to head back home in. They helped him. They made a signal. He was working on a boat—and they were helping him—when a destroyer came by and picked him up. His signal had been seen. The destroyer left a party on the island to watch for other castaways and for possible submarines. It grew up into a small base. What happened to the natives?"

His tone was sardonic. He drank his coffee and got up. He went rummaging in one of the other rooms of the ranch house. He came back with repeating shotguns and buckshot shells and other items. He made two fairly neat packs to be strapped behind saddles. There was food for three or four days, and blankets. And armament enough for a war.

"Stub," he said shortly, "you and Brick take care of the ranch. Ben and me—we're going off. You two stick together when you leave the house. Keep a couple of the dogs indoors at night and take 'em with you wherever you go."

Stub said blankly, "You goin' to hunt that critter you've been talking about?"

"We know it's here," said Tom. "It knows we know. If it's smart enough to learn how to talk English out of your brain,

Stub, it's pretty sure to know everything else you do. So it'll know better than to hang around here. It'll make for a place where nobody knows about it. And it'll try to get, there, whatever it wants to make friends for."

Stub scratched his head.

"That don't make sense to me!" he complained.

"Right!" said Tom. "That's what I hoped."

He went off to the corral. In minutes he was back before the ranch house with two horses. He slung a saddle-holster for a shotgun on each of them, in addition to the rifle-holsters already attached. He lashed the small packs in place. Then he drove two of the dogs indoors, to remain with Brick and Stub, and mounted and waited for Ben.

Ben mounted, but almost reluctantly. There was a slightly crawly sensation at the back of his neck. He felt a completely unreasonable aversion to the hunt. It was partly the sort of shuddery uneasiness a man feels at the thought of the uncanny or the supernatural. It was partly a natural sympathy with an imagined castaway on an alien and hostile world. But also he remembered that instinctive hatred he'd felt on the hillside, when a weapon he could not defy had blazed up before him. He felt that, too.

They rode off. Tom matter-of-factly headed toward the hillside Ben had essayed to climb. He put his mount at the ascent, with the dogs trotting close beside his horse's hoofs.

They reached the hill-crest, and the dogs created an uproar of agitated whinings and yelps. They bristled at an empty space of ground where something had pulled away grass and left a patch of bare earth. In the earth there were scratchings made with a stick. The scratchings spelled out, *Man, I want to make friends.*

Tom's expression was hard. He nodded at the scratched lines.

"He read Stub's mind, all right. Knows how to read and write. But he calls us 'man.' That means he's something else."

Ben said helplessly, "This is crazy!"

"Not if you're right about the fireball being something else," said Tom inexorably. "We're savage natives on a desert isle—or desert planet. What happens to savages when civilized people find 'em? What happened to the Indians? To the Incas? What happened in the South Seas? Want that to happen to all the Earth?" To the dogs he added, "Find him, boy! Go find him!"

But the dogs hung back. They trailed gingerly, whining. They did not like what they were hunting. At once they tended to snarl and to cringe and whimper. But they did show the way.

The trail led from this hill-crest into a ravine between even higher hills. They went on painstakingly. Presently, for no reason whatever, Ben found prickles running up and down his spine. He found himself sweating.

"I think it's watching us," he said uneasily.

"Yeah," said Tom. "I feel it too. Keep your gun handy."

They went on. The dogs made a great to-do about a place where brush almost closed the way before them. They snarled at the place. Ben noticed that the crawly sensation was stronger. There was nothing to account for the dogs' behavior. They went on, and the crawly feeling diminished.

"I think," said Ben, "we're getting farther away from it."

"My guess," Tom said dispassionately, "is that it was trying to paralyze us like it did Stub. Only maybe because there were two of us it couldn't. Or maybe we were too far away. Oh-oh!"

There was an upcropping of soft rock before them. It was weathered a dark gray. A stone had made lighter-colored scratches on the deeper-tinted rock. The scratchings said, *Will you be friends?*

"Maybe we should try," said Ben unhappily.

"It didn't paralyze us," said Tom, "but it ought to want to pick our brains like it did Stub's. You want that to happen? Get close to it, and—it could paralyze us like it did him. And it could find out everything we know. We know more than Stub. Some things we know—about government and guns and fighting and such—it'd better not know yet. Better not know at all!"

He dismounted with great deliberation. He picked up a scrap of stone and scratched *Show yourself* beneath the other scratchings. He remounted and said, "Come on."

Ben followed. This was still early morning, and in the ravine there were dewdrops on foliage where the sun had not yet warmed the ground. The sky was remarkably blue overhead. There were insect cries and once or twice there were birdcalls. But there were no other sounds at all except the thumping of the horses' hoofs and the small snuffling sounds from the dogs. Ben noticed their silence.

"The dogs aren't trailing now."

"I know," said Tom. "The thing doubled back."

But he went on, and Ben began to feel a little bit sick. He saw Tom's intention. And in a very real sense Tom was right. A civilized man cast ashore on any desert island is a deadly danger to the aborigines—unless they kill him. If a race existed of which a member had been cast away on Earth in a wrecked space craft, that alien creature would be deadly indeed. It was already proved that it could subjugate an individual and learn all that his brain contained. It would naturally look upon men as animals lower than itself. It would not feel any obligation not to injure them, certainly, and if it could repair its space craft or make a signaling apparatus to call to its fellows . . . Then humanity would share the fate of other savage races which died or shriveled on contact with civilization.

On the other hand, it could be a castaway in a more permanent sense. Its space boat might be wrecked utterly beyond repair. It might have no faintest hope of signaling. In such a case one could sympathize deeply. A man on an alien planet, millions of billions of miles from any other human being or any hope of companionship. A man on a world of strange and hostile beings would be a tragic case indeed. If Earth was such an alien planet to this castaway he could have no hope, and his tragedy would be heart-wrenching.

So that Ben felt a sickish reluctance to hunt down the creature which scratched desperate messages asking for friendship. And still he remembered the crawling sensation he had felt from its mere presence.

The horses climbed, with the dogs beginning to act naturally again. They trotted here and there and sniffed absorbedly at this and that. The floor of the ravine dropped below them. They were climbing out of it. They reached its upper rim. And here they could look back and down for a long way, out into the lower valley in which the ranch house lay, though the house and corrals were invisible.

"We'll backtrack in a minute," said Tom. "It'll think we're going to report what we know."

He went on a quarter mile, with the dogs rummaging briskly in the underbrush. Then he halted and called them in a low tone. He tethered them and tied the horses.

"The thing scares them," he said dourly. "We don't want 'em running off. We'll need them."

He drew his rifle from the saddle-holster and started back

along the way in which they had come. Ben duplicated his actions in a peculiar mingling of pity and revulsion.

It took time to retrace that last quarter of a mile in silence. They disturbed a surprising amount of small life as they went along. A column of ants swarming to and fro between their buried city and some tiny bit of carrion. Birds he had not seen from horseback. Dragonflies. There was a rustling that would be a rabbit. And there were an infinite variety of brushwood and smaller plants among the trees.

They came out, very cautiously, where they could look down at the rock on which something had scratched a plea for friendship.

There was something there now, looking at the scratched *Show yourself* beneath its own message.

It was not human, though it was the size of a man. It was a pale, ash-gray color all over. It had two legs, a head and two arms. Ben could not make out whether it was clothed or in what or whether the ash color of its form was the color of the creature itself. There was assuredly a belt about its middle, to which things were fastened. It was too far away for him to see the features of its head. But he could not look too closely, anyhow. He wanted to be sick. He quivered in horror and instinctive sympathy and a bristling, unreasoning hostility.

The thing was looking at the writing on the gray stone. It turned. It faced them exactly. Ben felt that prickly, crawling sensation that made the dogs whimper and snarl. The thing seemed to know that they were there and looking at it. It stood still, showing itself defiantly.

Tom fired.

The thing moved with incredible swiftness and agility. To Ben it seemed that it was out of sight before the high-powered bullet struck—within inches of where it had stood. The report of the rifle echoed and re-echoed and echoed yet again between the walls of the ravine. And then Tom was swearing bitterly, and Ben was at once relieved and instinctively furious because the thing had not been killed.

He heard his own voice saying strainedly, "It's warned now. We'll have to get to town and report that it exists. We'll have to get Air Force planes to spot it from the air and soldiers to hunt it on the ground. If it can be captured—"

"Who'll believe us?" asked Tom detachedly.

Ben didn't have to answer. But the answer was *nobody*.

Tom wasted no time staring where the thing had vanished.

He turned and made his way purposefully back toward the horses. He had a very definite plan of action in his mind.

"Too bad I missed," said Tom dourly. "But I can guess what the thing will do next. It got from Stub's mind—along with how to talk and read and write—what he knows about the country round about. It came to the ranch house because Stub knew about that. It'll go to some other place he knows about, either to try to make friends or to get something it wants. And Stub gets whisky from Clayton, at his cabin up ahead. Five miles. If we can get there first we may get another shot at it."

There was nothing for Ben to say. But when they'd reached the horses again and were mounted and riding for Clayton's cabin, he couldn't help imagining this situation as the castaway would see it. He'd be perhaps hundreds of light-years from any others of his kin. Perhaps there was no hope that any of his kind would ever know what had happened to him. He could be cast away as hopelessly as ever a sailor on an unknown isle. And the scene of his casting away was filled with ferocious native inhabitants with primitive blood-lusts and arbitrary enmities. He'd know that as his presence became known a world would arm to hunt him down to murder him. He'd expect to be hunted untiringly, ruthlessly, terribly.

A man in such a case would become the wild beast his enemies imagined him. He would fight as ferociously as they did. The castaway . . .

They rode for seven miles instead of five before they reached Clayton's cabin. There was a patch of a garden. There was a crumbling barn. Clayton sat trembling on his doorstep, his sallow face ashen beneath its stubble of beard. His wife was loading a rifle with extraordinarily steady fingers. Her face was like a marble mask. As Ben and Tom Hartle rode into view she turned burning eyes upon them.

"Some critter kilt my little Sally," she said tonelessly. "Come help me track it down an' kill it."

Her husband quavered, "It weren't a natural beast. I seen it. No use trackin'."

Tom Hartle said coldly, "It walked on two legs, it was ash-gray, dogs were scared of it and it wasn't a human being."

"Y-yeah," whimpered Clayton. Even in the shock of hearing such news Ben was ashamed that a creature which was not human had encountered such a specimen of the human race.

"I was—ahuntin' for squir'ls," Clayton said, quavering. "Sally was with me. The dawgs turned up something they was scared of. They yelped an' howled terrible. I went to see and Sally come with me, and this heah thing came bustin' out an' I let it have both bar'ls, an' lightnin' come from it and I run . . ."

"Leaving Sally," said Tom.

"It flung lightnin'," whimpered Clayton. "I—forgot."

Tom addressed himself to Clayton's wife.

"Did you telephone for help to hunt it down?" he asked coldly. "We'll help, but there ought to be more—to be certain it's killed."

The woman put down the gun and went into the house with a steady, machine-like precision. They heard the tinkle of the telephone-bell as she cranked it to call Central. Tom dismounted and tied up his horse. He considered his arsenal.

"Buckshot for brush," he decided and took the repeating shotgun. Ben unhappily followed suit.

The woman came out and picked up the rifle and started for the edges of the wooded ground about. They followed. Tom whistled to his dogs to follow. They overtook the woman.

"Where'd it happen?" demanded Tom.

She nodded dumbly in the direction in which she was headed. They marched with her. A part of Ben's mind said dispassionately that the thing they were hunting was not human, and therefore it would not consider humans as other than animals. A man on an alien world would not be choosy. The thing could not be blamed for killing a human child any more than for killing a fawn. . . . But there was a murderous red rage filling Ben's veins even as he thought so dispassionately.

The woman sobbed presently, and Ben saw why. There were footprints on a patch of bare damp ground. A man's and a small child's. They went on. The dogs snuffled curiously.

A scorched smell came on the air through the trees. They moved toward it. They saw Clayton's shotgun, thrown away in his panicked flight. Ben went on, knowing what to look for.

There was a charred place on the ground. It was quite eighteen inches across. It was baked dry. In the very center the organic part of the earth was turned to ash, and the ash

was melted to a curiously glassy slag. Ben knew what had happened. There had been a flash of flame and intolerable heat—which Clayton had called lightning—and nearby shrubs burst into steam. And then there was nothing but a screeching man in blind flight with a little girl left behind.

But there was no sign of the child. No blood. No tracks. No torn scrap from a tiny dress. There was not even, here, any trace of the scent or influence which made dogs snarl and whine and yelp. There was nothing to do but hunt in an expanding circle around the place where Clayton's shotgun had been thrown away. They searched, very grimly.

In a surprisingly brief time other men came through the woods to join the hunt. It spread more rapidly in extent. Within two hours men were arriving even from Tateville, having come as far as possible by car and walked the balance with guns and dogs. In an hour there were twenty men turning over every smallest bush or hiding place where a child's body could have been thrust. In two hours there were nearer a hundred. The men beat thickets. They searched in caves and under fallen trees. They completely ignored Clayton's story of an unnatural beast and a flash of lightning. Some of them hunted for the tracks of a mountain lion. More, perhaps, hunted for a man.

They found nothing.

The hunt went on and on and on. Ben searched as desperately as any. Now and again some searchers met and conferred in pantings as to where and how to hunt next. As time passed they did not seem to grow weary. With dwindling hope—not that there had been hope to begin with—fury increased. Men raged as they hunted for the killer of a little girl.

Then Tom came upon Ben as he dug furiously into a brush pile which was a fallen tree. A child's body could have been hidden in there. Ben almost believed that it was.

But Tom grabbed him by the shoulder and dragged him away.

"No use hunting now," he raged bitterly, "we just found a man asleep!"

Ben panted at him, beside himself with fury and hatred. It had grown to mania as he envisioned the terror of a small child in the grip of the ashen-gray creature he and Tom had seen and which Tom had tried to kill. But Tom shook him.

"The thing took the man's clothes!" raged Tom. "It took

his clothes and left him asleep like Stub was! He can't be waked! You know what that means!"

"I'm thinking about the kid," said Ben thickly. "What does it mean?"

"It means," raged Tom, "that the thing's learned everything another man had in his brain! It's wearing the man's clothes now, and at a distance it'll pass for a man!"

Ben said, as thickly as before, "But what'd it do with the little girl? I'll kill the damned thing! I'll—"

Tom said bitterly, "I forgot. She's all right."

Then Ben's eyes opened wide with shock. He shook his head to clear it. He stared at Tom, with the noise of men hunting over a couple of square miles all about him, and the excited noises of dogs, and many shoutings. Ben said slowly, "The kid's all right? Then what are we hunting for?"

"I forgot about the kid," said Tom bitterly. "We found a man asleep and dead to the world with his clothes stripped off him. The thing's wearing those clothes! Dogs went crazy near the spot. I went back to the cabin—and the phone had been ringing for half an hour. Little Sally Clayton walked up to a house in Tateville an hour ago, knocked on the door, and very politely asked for a slice of bread and butter and would they tell her father to come and get her? She says a funny man carried her to town. A nice funny man. She's unharmed. But she didn't travel fifteen miles by herself! The nice funny man carried her! She says he could run very, very fast. And here we're hunting him for nothing and he's got away. . . ." Tom's voice ended in weariness. "All right. I'll go stop the search."

He went stumbling away, and Ben found his thinking hopelessly confused. The castaway had taken a child away when it was deserted in the woods. But it hadn't harmed the child. And the child said it was a nice funny man. . . .

There began a shouting as the word was passed by bellowings that the little girl was safe in Tateville. One man shouted the news, and others bellowed questions, and gradually the tumult was stilled, and many men moved toward the cabin, talking in the wilderness.

When Ben reached the cabin Tom was gone. He'd have gone instantly to Tateville. He'd become obsessed with the notion—which was probably a right one—that the castaway had to be found and killed because he would regard humans as explorers have always regarded savages and lower forms

of life. Tom had the convictions of the barbarian king of Mexico when the Spaniards appeared—and Opecancanough and King Phillip and Pontiac and Sitting Bull and ten thousand other long dead defenders of their peoples against civilization. And Ben desolately shared a part of his convictions—but he was also sorry for any castaway on an alien world which hated him.

When Ben reached the small town, there were knots of men talking everywhere. There were almost as many tales of little Sally's adventure as there were tellers, but none approached what Ben knew to be the truth. Some groups were satisfied that the little girl was found and unharmed. Others were convinced that a lynching was definitely in order. Some wavered between those convictions. Ben went to the newspaper office. His substitute was out, doubtlessly gathering the news of a lost little girl and her finding as a remarkably interesting story, when Ben knew that the real story was literally too strange to print.

He sat down in his working chair to figure things out. He was astonished to discover how weary he was. He was startled to realize that the hunt and the return to Tateville afterward had taken up so much of the day that it was now dusk. Dusk came early to Tateville, though, in its valley among high mountains. Ben sat in his darkening office and wrily tried to figure out a way to print the truth—so that it would be taken as the serious, urgent warning that it was. Outside the office the many small sounds of the little town changed and quieted, though there remained the sound of voices.

The sky to westward, above the mountains, turned tawny red. Through the office window Ben could see the foliage on easterly slopes change color in that illumination. He smoked, groping for a way to print the story in the Tateville *Record* so that it would be picked up by the wire services, checked on and needful action taken. Ben couldn't contradict Tom Hartle's opinion, though he couldn't wholly agree now. But he did know that some action was needful. The castaway had to be made harmless to mankind. If that meant killing him one could feel very sorry for him, but nevertheless he would have to be killed.

Night fell, and still Ben had no notion how to take care of the newsworthy fact that a wrecked space craft had crashed into the mountains to the east of Tateville, that there had been one survivor, that the space boat was now buried under a landslide—perhaps brought about by the surviving

passenger—and that an alien, nonhuman creature was now at large on Earth. There was simply no way to make anybody believe it.

He struck a match and lighted his pipe again. It was singularly restful to sit so ordinarily. But now he was acutely unhappy. Yet it would do no good to make a light and stare at the walls of his office.

The door opened, and a figure stood there.

"Mr. Lyon?"

Ben said, "Yes. I'll make a light." He stirred.

"Don't," said the visitor. "I'll be needing my eyes presently. No need to dazzle them with light. I was in that hunt today, Mr. Lyon. There's some mystery there. The little girl was perfectly all right, but she says it was a funny man who brought her to town. A nice funny man. But she can't say what was funny about him. What do you make of that, Mr. Lyon?"

Ben said drily, "If you'd like to hear the facts as—they were given to me I can tell you." His visitor sat down in a chair he seemed able to find in the dark without any difficulty. He leaned back. Ben said, "You won't believe this, but—"

He told the story straight, as if it had so been told to him. It was an experiment to see how a normal man would react to the narrative of the actual facts. It might give a clue to how he could tell the story convincingly. But as he went on he was wrily aware that he was telling it baldly.

When he finished, his visitor said thoughtfully, "Are you going to print it that way?"

"Would you believe it?" asked Ben. His pipe had gone out. He scratched another match to light it. The figure in the chair made an abrupt movement and then was still. Ben saw his face dimly in the match-light. His hand quivered slightly as he held the match over the pipe-bowl.

"Why—yes," said his visitor. "It's true, as far as it goes. In fact I—" There was a pause. "I have been in touch with the castaway. I came here to tell you the story you just told me, with one addition."

Ben blew out the match and tried to think whose voice he was listening to. It was familiar, but he wasn't sure.

"The castaway," said the figure in the chair, "blundered on the man Clayton, who shot at him. The castaway threw a flame-pellet to frighten him away. It did. He left the little girl behind. And she was hysterical with terror at the sight

of him. So he—" Another pause. "He used his mind to calm her. And he could look into her memories very easily. There was no need to—quiet her as the man Stub was quieted. The castaway was very bitter and desperate, just then. He had seen only three men at close quarters, and all were ferocious creatures who tried to kill him. He believed that he would have to make himself a fortress and weapons to defend himself against the murderous natives of this world. But from the little girl's memories he began to understand what human beings are really like."

Ben said—his mouth was queerly dry—"What did he learn?"

"That men and his race are much alike. It would have to be so. As all birds, to fly, must have wings that are very similar, so beings to be intelligent must have intelligences that are very near in kind. The castaway can be friends with men. He can find companionship among men. He needs to have companionship. He cannot hope ever to leave Earth. If he is alone he will go mad, like a man in solitude."

Ben said in a rusty voice, "That's a message for me?"

"Yes," said the voice quietly. "The memories of the man Stub said that you were a good man. The memories of the child said the same, and also the memories of another man whom the castaway—quieted when he was discovered during the hunt for the lost child. So the castaway asks your help."

"To make friends among men," said Ben.

"Yes."

"He can't," said Ben grimly. "He is different from us, so we hate him. We bristle when we know he is near. He knows more than we do, so we fear him. When it is known that he exists on Earth, all of humanity will combine to hunt him down."

The voice said, "Even you?"

"I am trying," said Ben defiantly, "to devise a way to make other men believe that he does exist. I am trying to arrange for the hunt for him to begin, so he will be killed!"

There was a long pause. Out in the darkness of the town a dog yelped hysterically. Another dog snarled. There was a small growling murmur. The figure by the wall sat up straighter.

"You know," it said softly, "that I am the castaway."

"Of course I know!" said Ben fiercely. "And you can kill me! And I am very sorry for you because you will be killed —no matter how much you wish to be our friend—but there

is nothing else to be done! You have to be killed because you are intelligent and are not a man!"

The voice said curiously, "But you don't hate me—"

"I do," said Ben. His hands were clenched. "My scalp crawls at the thought of you sitting there and talking to me, and you not a man! But I will be sorry for you even while I try to kill you."

The sound of dogs was louder, and nearer. There was a growling as of a small but angry mob.

The figure stood up.

"I made a mask of clay," he said detachedly, "and I put on the clothes of a man. I shall have to make a better mask, and find out how to deceive dogs. I need to live among men. After all, I am a civilized being! I do not think your warned men will detect me. I learn quickly. I have already learned that noises like—that—" Dogs snarled furiously, not far away. "Noises like that mean that somebody is on my trail. So I will leave you."

The figure moved toward the door. Ben snatched at the drawer of his desk. There was a revolver inside. Instantly, it seemed, he was paralyzed.

The figure ran lightly out of the door, and Ben could move again. He seized the revolver and ran to the door. He saw dark figures approaching, with the dogs yapping and snarling and hysterical among them.

"Hurry!" shouted Ben from the doorway, waving the revolver urgently. "Come on! He's running that way—"

He was in the thick of the running mass of men as they swarmed past his office. They ran among trees. They plunged past the houses and the shrubbery and the garages and the tool sheds of the residences of Tateville. Once they heard a woman scream and plunged toward the sound and found her in a dead faint. The town became a swarming, deadly manhunt—or creature-hunt. There was one dog which seemed to have greater courage than the rest. It ran ahead of the others, and they heard it screaming and snarling its hatred of something that fled before it. The men took that dog as their guide. The unseen fugitive doubled back through the other end of town. The men made a short cut in the darkness to overtake it.

Ben found himself uttering beastly cries of fury as he ran. And he was one of those who saw the castaway as it emerged into the starlight just beyond the town, where a bridge ran over the small swift stream on which Tateville

depended for water. The screaming of an infuriated dog ran with it—but there was no dog. And Ben knew that just as the castaway had learned to talk like men, it had also learned to scream like an hysterical dog, and it was leading the pursuit where it wished.

Guns exploded luridly. The range was long. But the running figure wavered and limped and lurched—and went over the bridge-rail into the stream.

Then Ben found himself coldly composed and desperately dejected. Because this was plainly the plan of the castaway. The stream ran swift and even fairly deep. A man could drown in it. Especially a wounded man.

But the castaway was not a man, and Ben doubted profoundly that it was wounded. He knew that raging men, with dogs, would follow the stream down, hunting a body or a trail of a wounded man staggering out of it. He suspected that they would come finally to the conclusion that a dead body lay in an eddy of some one of the stream's pools, and perhaps they would find scraps of rags to buttress their conviction that the fugitive was dead. But he was sure that they would never actually find a body. And he was quite sure that they would never suspect or believe that they had not chased some unknown man—some maniac, perhaps—who had wandered among the wilds and essayed a monstrous crime and had properly been hunted to his death for it.

In this, of course, he was quite right. But he was the only man in the world who held that view and had that knowledge. Later that same night, when Tom Hartle came to him with triumph in his expression because the castaway was dead, Ben tried to convince him that the castaway was very much alive.

"He's dead," said Tom Hartle positively. "I saw him drop into the stream. He'd never live through the rocks downstream. Nobody could! We can forget it now, Ben. Nobody'd have believed that he came from somewhere out among the stars, but he had to be killed. And he has been!" Then he said relievedly, "We can go on that fishing trip now, Ben."

But Ben didn't go. He wanted to think things over. He knew the castaway was still alive, and he felt very sorry for him, but he knew he should be killed. But he didn't know how to convince anybody that such a creature existed. He told a fiction writer about it, later, but the writer said he didn't believe it. He made a story about it, but nobody took it seriously.

Ben almost persuaded himself that the castaway had been truthful when he said he had no hope of escape from Earth or of being able to signal his kin. Then, one day, something disturbing occurred to him. No matter how many brains the castaway picked around Tateville he wouldn't be apt to get any clear idea of atom bombs, or that the material for atomic fuel could be had on Earth. But the castaway might learn about such matters away from Tateville. And knowledge of atomic fuel to be had on Earth might give the alien hope of escape back to his native world. And he might tell his kindred about the interesting savages he'd found where he'd been cast away. Which would be the beginning of the end, for humanity.

Ben's been worrying a lot since the appearance of that curious disease at Los Alamos and Hansford, Washington. It's thought to be caused by radiation. Every so often a key technician, or one of the authorities on atomic theory, is found sleeping heavily. His pulse is normal. His breathing is deep. There is absolutely nothing wrong with him that can be detected. He wakes up after about twenty-four hours and only remembers a creepy sensation preceding the attack and a sensation of cold at the temples.

There've been less than a dozen cases of the disease so far. Curiously, every one has been a man with top-secret information.

Ben doesn't sleep well, these nights. He's worrying.

Proxima Centauri

The *ADASTRA*, from a little distance, already shone in the light of the approaching sun. The vision disks which scanned the giant space ship's outer skin relayed a faint illumination to the visiplates within. They showed the monstrous, rounded bulk of the metal globe, criss-crossed with girders too massive to be transported by any power less than that of the space ship itself. They showed the whole, five-thousand-foot globe as an ever so faintly glowing object, seemingly motionless in mid-space.

In that seeming, they lied. Monstrous as the ship was, and apparently too huge to be stirred by any conceivable power, she was responding to power now. At a dozen points upon her faintly glowing side there were openings. From those openings there flowed out tenuous purple flames—less bright than the star ahead—but they were the disintegration blasts from the rockets which had lifted the *Adastra* from the surface of Earth and for seven years had hurtled it on through interstellar space toward Proxima Centauri, nearest of the fixed stars to humanity's solar system.

Now they hurtled it forward no more. The mighty ship was decelerating. Thirty-two and two-tenths feet per second, losing velocity at the exact rate to maintain the effect of Earth's gravity within its bulk, the huge globe slowed. For months braking had been going on. From a peak-speed measurably near the velocity of light, the first of all vessels to span the distance between two solar systems had slowed and slowed, and would reach a speed of maneuver some sixty million miles from the surface of the star.

Far, far ahead, Proxima Centauri glittered invitingly. The vision disks that showed its faint glow upon the space ship's hull had counterparts which carried its image within the

hull, and in the main control room it appeared enlarged very many times. An old, white-bearded man in uniform regarded it meditatively. He said slowly, as if he had said the same thing often before, "Quaint, that ring. It is double, like Saturn's. And Saturn has nine moons. One wonders how many planets this sun will have."

The girl said restlessly, "We'll find out soon, won't we? We're almost there. And we already know the rotation period of one of them! Jack said that—"

Her father turned deliberately to her. "Jack?"

"Gary," said the girl. "Jack Gary."

"My dear," said the old man mildly, "he seems well-disposed, and his abilities are good, but he is a Mut. Remember!"

The girl bit her lip.

The old man went on, quite slowly and without rancor: "It is unfortunate that we have had this division among the crew of what should have been a scientific expedition conducted in the spirit of a crusade. You hardly remember how it began. But we officers know only too well how many efforts have been made by the Muts to wreck the whole purpose of our voyage. This Jack Gary is a Mut. He is brilliant, in his way. I would have brought him into the officers' quarters, but Alstair investigated and found undesirable facts which made it impossible."

"I don't believe Alstair!" said the girl evenly. "And, anyhow, it was Jack who caught the signals. And he's the one who's working with them, officer or Mut! And he's human, anyhow. It's time for the signals to come again and you depend on him to handle them."

The old man frowned. He walked with a careful steadiness to a seat. He sat down with an old man's habitual and rather pathetic caution. The *Adastra,* of course, required no such constant vigilance at the controls as the interplanetary space ships require. Out here in emptiness there was no need to watch for meteors, for traffic, or for those queer and yet inexplicable force fields which at first made interplanetary flights so hazardous.

The ship was so monstrous a structure, in any case, that the tinier meteorites could not have harmed her. And at the speed she was now making greater ones would be noticed by the induction fields in time for observation and if necessary the changing of her course.

A door at the side of the control room opened briskly and

a man stepped in. He glanced with conscious professionalism at the banks of indicators. A relay clicked, and his eyes darted to the spot. He turned and saluted the old man with meticulous precision. He smiled at the girl.

"Ah, Alstair," said the old man. "You are curious about the signals, too?"

"Yes, sir. Of course! And as second in command I rather like to keep an eye on signals. Gary is a Mut, and I would not like him to gather information that might be kept from the officers."

"That's nonsense!" said the girl hotly.

"Probably," agreed Alstair. "I hope so. I even think so. But I prefer to leave out no precaution."

A buzzer sounded. Alstair pressed a button and a vision plate lighted. A dark, rather grim young face stared out of it.

"Very well, Gary," said Alstair curtly.

He pressed another button. The vision plate darkened and lighted again to show a long corridor down which a solitary figure came. It came close and the same face looked impassively out. Alstair said even more curtly, "The other doors are open, Gary. You can come straight through."

"I think that's monstrous!" said the girl angrily as the plate clicked off. "You know you trust him! You have to! Yet every time he comes into officers' quarters you act as if you thought he had bombs in each hand and all the rest of the men behind him!"

Alstair shrugged and glanced at the old man, who said tiredly, "Alstair is second in command, my dear, and he will be commander on the way back to Earth. I could wish you would be less offensive."

But the girl deliberately withdrew her eyes from the brisk figure of Alstair with its smart uniform, and rested her chin in her hands to gaze broodingly at the farther wall. Alstair went to the banks of indicators, surveying them in detail. The ventilator hummed softly. A relay clicked with a curiously smug, self-satisfied note. Otherwise there was no sound.

The *Adastra,* mightiest work of the human race, hurtled on through space with the light of a strange sun shining faintly upon her enormous hull. Twelve lambent purple flames glowed from holes in her forward part. She was decelerating, lessening her speed by thirty-two point two feet per second, maintaining the effect of Earth's gravity within her bulk.

Earth was seven years behind and uncounted millions of millions of miles. Interplanetary travel was a commonplace in the solar system now, and a thriving colony on Venus and a precariously maintained outpost on the largest of Jupiter's moons promised to make space commerce thrive even after the dead cities of Mars had ceased to give up their incredibly rich loot. But only the *Adastra* had ever essayed space beyond Pluto.

She was the greatest of ships, the most colossal structure ever attempted by man. In the beginning, indeed, her design was derided as impossible of achievement by the very men who later made her building a fact. Her framework beams were so huge that, once cast, they could not be moved by any lifting contrivance at her builders' disposal. Therefore the molds for them were built and the metal poured in their final position as a part of the ship. Her rocket tubes were so colossal that the necessary supersonic vibrations—to neutralize the disintegration effect of the Caldwell field—had to be generated at thirty separate points on each tube, else the disintegration of her fuel would have spread to the tubes themselves and the big ship afterward, with even the mother planet following in a burst of lambent purple flame. At full acceleration a set of twelve tubes disintegrated five cubic centimeters of water per second.

Her diameter was a shade over five thousand feet. Her air tanks carried a reserve supply which could run her crew of three hundred for ten months without purification. Her stores, her shops, her supplies of raw and finished materials, were in such vast quantities that to enumerate them would be merely to recite meaningless figures.

There were even four hundred acres of food-growing space within her, where crops were grown under sun lamps. Those crops used waste organic matter as fertilizer and restored exhaled carbon dioxide to use, in part as oxygen and in part as carbohydrate foodstuffs.

The *Adastra* was a world in herself. Given power, she could subsist her crew forever, growing her food supplies, purifying her own internal atmosphere without loss and without fail, and containing space within which every human need could be provided, even solitude.

And starting out upon the most stupendous journey in human history, she had formally been given the status of a world, with her commander empowered to make and enforce all needed laws. Bound for a destination four light-years dis-

tant, the minimum time for her return was considered to be fourteen years. No crew could possibly survive so long a voyage undecimated. Therefore the enlistments for the voyage had not been by men, but by families.

There were fifty children on board when the *Adastra* lifted from Earth's surface. In the first year of her voyage ten more were born. It had seemed to the people of Earth that not only could the mighty ship subsist her crew forever, but that the crew itself, well-nourished and with more than adequate facilities both for amusement and education, could so far perpetuate itself as to make a voyage of a thousand years as practicable as the mere journey to Proxima Centauri.

And so it could, but for a fact at once so needless and so human that nobody anticipated it. The fact was tedium. In less than six months the journey had ceased to become a great adventure. To the women in particular, the voyage of the big ship became deadly routine.

The *Adastra* itself took on the semblance of a gigantic apartment house without newspapers, department stores, new film plays, new faces, or even the relieving annoyances of changeable weather. The sheer completeness of all preparations for the voyage made the voyage itself uneventful. That meant tedium.

Tedium meant restlessness. And restlessness, with women on board who had envisioned high adventure, meant the devil to pay. Their husbands no longer appeared as glamorous heroes. They were merely human beings. The men encountered similar disillusionments. Pleas for divorce flooded the commander's desk, he being legally the fount of all legal action. During the eighth month there was one murder, and in the three months following, two more.

A year and a half out from Earth, and the crew was in a state of semi-mutiny originating in sheer boredom. By two years out, the officers' quarters were sealed off from the greater part of the *Adastra's* interior, the crew was disarmed, and what work was demanded of the mutineers was enforced by force guns in the hands of the officers. By three years out, the crew was demanding a return to Earth. But by the time the *Adastra* could be slowed and stopped from her then incredible velocity, she would be so near her destination as to make no appreciable difference in the length of her total voyage. For the rest of the time the members of the crew strove to relieve utter monotony by such vices and such

pastimes as could be improvised in the absence of any actual need to work.

The officers referred to their underlings by a contraction of the word "mutineers"—Muts. The crew came to have a queer distaste for all dealing with the officers. But, despite Alstair, there was no longer much danger of an uprising. A certain mental equilibrium had—very late—developed.

From the nerve-racked psychology of dwellers in an isolated apartment house, the greater number of the *Adastra's* complement came to have the psychology of dwellers in an isolated village. The difference was profound. In particular the children who had come to maturity during the long journey through space were well-adjusted to the conditions of isolation and of routine.

Jack Gary was one of them. He had been sixteen when the trip began, son of a rocket-tube engineer whose death took place the second year out. Helen Bradley was another. She had been fourteen when her father, as designer and commanding officer of the mighty globe, pressed the control key that set the huge rockets into action.

Her father had been past maturity at the beginning. Aged by responsibility for seven uninterrupted years, he was an old man now. And he knew, and even Helen knew without admitting it, that he would never survive the long trip back. Alstair would take his place and the despotic authority inherent in it, and he wanted to marry Helen.

She thought of these things, with her chin cupped in her hand, brooding in the control room. There was no sound save the humming of the ventilator and the infrequent smug click of a relay operating the automatic machinery to keep the *Adastra* a world in which nothing ever happened.

A knock on the door. The commander opened his eyes a trifle vaguely. He was very old now, the commander. He had dozed.

Alstair said shortly, "Come in!" and Jack Gary entered.

He saluted, pointedly to the commander. Which was according to regulations, but Alstair's eyes snapped.

"Ah, yes," said the commander. "Gary. It's about time for more signals, isn't it?"

"Yes, sir."

Jack Gary was very quiet, very businesslike. Only once, when he glanced at Helen, was there any hint of anything but the formal manner of a man intent on his job. Then his eyes told her something, in an infinitely small fraction of a

second, which changed her expression to one of flushed content.

Short as the glance was, Alstair saw it. He said harshly: "Have you made any progress in deciphering the signals, Gary?"

Jack was setting the dials of a panwave receptor, glancing at penciled notes on a calculator pad. He continued to set up the reception pattern.

"No, sir. There is still a sequence of sounds at the beginning which must be a form of call, because a part of the same sequence is used as a signature at the close. With the commander's permission I have used the first part of that call sequence as a signature in our signals in reply. But in looking over the records of the signals I've found something that looks important."

The commander said mildly, "What is it, Gary?"

"We've been sending signals ahead of us on a tight beam, sir, for some months. Your idea was to signal ahead, so that if there were any civilized inhabitants on planets about the sun, they'd get an impression of a peaceful mission."

"Of course!" said the commander. "It would be tragic for the first of interstellar communications to be unfriendly!"

"We've been getting answers to our signals for nearly three months. Always at intervals of a trifle over thirty hours. We assumed, of course, that a fixed transmitter was sending them, and that it was signaling once a day when the station was in the most favorable position for transmitting to us."

"Of course," said the commander gently. "It gave us the period of rotation of the planet from which the signals come."

Jack Gary set the last dial and turned on the switch. A low-pitched hum arose, which died away. He glanced at the dials again, checking them.

"I've been comparing the records, sir, making due allowance for our approach. Because we cut down the distance between us and the star so rapidly, our signals today take several seconds less to reach Proxima Centauri than they did yesterday. Their signals should show the same shortening of interval, if they are actually sent out at the same instant of planetary time every day."

The commander nodded benevolently.

"They did, at first," said Jack. "But about three weeks ago the time interval changed in a brand-new fashion. The signal strength changed, and the wave form altered a little, too, as if

a new transmitter was sending. And the first day of that change the signals came through one second earlier than our velocity of approach would account for. The second day they were three seconds earlier, the third day six, the fourth day ten, and so on. They kept coming earlier by a period indicating a linear function until one week ago. Then the rate of change began to decrease again."

"That's nonsense!" said Alstair harshly.

"That's the record," returned Jack curtly.

"But how do you explain it, Gary?" asked the commander mildly.

"They're sending now from a space ship, sir," replied Jack briefly, "which is moving toward us at four times our maximum acceleration. And they're flashing us a signal at the same interval, according to their clocks, as before."

A pause. Helen Bradley smiled warmly. The commander thought carefully. Then he admitted:

"Very good, Gary! It sounds plausible. What next?"

"Why, sir," said Jack, "since the rate of change shifted, a week ago, it looks as if that other space ship started to decelerate again. Here are my calculations, sir. If the signals are sent at the same interval they kept up for over a moment, there is another space ship headed toward us, and she is decelerating to stop and reverse and will be matching our course and speed in four days and eighteen hours. They'll meet and surprise us, they think."

The commander's face lighted up. "Marvelous, Gary! They must be far advanced indeed in civilization! Intercourse between two such peoples, separated by four light-years of distance! What marvels we shall learn! And to think of their sending a ship far beyond their own system to greet and welcome us!"

Jack's expression remained grim.

"I hope so, sir," he said dryly.

"What now, Gary?" demanded Alstair angrily.

"Why," said Jack deliberately, "they're still pretending that the signals come from their planet, by signaling at what they think are the same times. They could exchange signals for twenty-four hours a day, if they chose, and be working out a code for communication. Instead, they're trying to deceive us. My guess is that they're coming at least prepared to fight. And if I'm right, their signals will begin in three seconds, exactly."

He stopped, looking at the dials of the receptor. The tape

which photographed the waves as they came in, and the other which recorded the modulations, came out of the receptor blank. But suddenly, in just three seconds, a needle kicked over and tiny white lines appeared on the rushing tapes. The speaker uttered sounds.

It was a voice which spoke. So much was clear. It was harsh yet sibilant, more like the stridulation of an insect than anything else. But the sounds it uttered were modulated as no insect can modulate its outcry. They formed what were plainly words, without vowels or consonants, yet possessing expression and varying in pitch and tone quality.

The three men in the control room had heard them many times before, and so had the girl. But for the first time they carried to her an impression of menace, of threat, of a concealed lust for destruction that made her blood run cold.

II

The space ship hurtled on through space, her rocket tubes sending forth small and apparently insufficient purple flames which emitted no smoke, gave off no gas, and were seemingly nothing but small marsh fires inexplicably burning in emptiness.

There was no change in her outer appearance. There had been none to speak of in years. At long, infrequent intervals men had emerged from air locks and moved about her sides, bathing the steel they walked on and themselves alike with fierce glares from heat lamps lest the cold of her plating transmit itself through the material of the suits and kill the men like ants on redhot metal. But for a long time no such expedition had been needed.

Only now, in the distant faint light of Proxima Centauri, a man in a space suit emerged from such a tiny lock. Instantly he shot out to the end of a threadlike life line. The constant deceleration of the ship not only simulated gravity within. Anything partaking of its motion showed the same effect. The man upon its decelerating forward side was flung away from the ship by his own momentum, the same force which, within it, had pressed his feet against the floors.

He hauled himself back laboriously, moving with an exaggerated clumsiness in his bloated space suit. He clung to handholds and hooked himself in place, while he worked an electric drill. He moved still more clumsily to another place and drilled again. A third, and fourth, and fifth. For half an

hour or more, then, he labored to set up on the vast steel surface, which seemed always above him, an intricate array of wires and framework. In the end he seemed content. He hauled himself back to the air lock and climbed within. The *Adastra* hurtled onward, utterly unchanged save for a very tiny fretwork of wire, perhaps thirty feet across, which looked more like a microscopic barbed-wire entanglement than anything else.

Within the *Adastra,* Helen Bradley greeted Jack warmly as he got out of his space suit.

"It was horrible!" she told him, "to see you dangling like that! With millions of miles of empty space below you!"

"Let's go turn on the inductor and see how the new reception grid works," said Jack quietly.

He hung up the space suit. As they turned to go through the doorway their hands touched accidentally. They looked at each other and faltered. They stopped, Helen's eyes shining. They unconsciously swayed toward each other. Jack's hands lifted hungrily.

Footsteps sounded close by. Alstair, second in command of the space ship, rounded a corner and stopped short.

"What's this?" he demanded savagely. "Just because the commander's brought you into officers' quarters, Gary, it doesn't follow that your Mut methods of romance can come, too!"

"You dare!" cried Helen furiously.

Jack, from a hot dull flush, was swiftly paling to the dead-white of rage.

"You'll take that back," he said very quietly indeed, "or I'll show you Mut methods of fighting with a force gun! As an officer, I carry one, too, now!"

Alstair snarled at him.

"Your father's been taken ill," he told Helen angrily. "He feels the voyage is about over. Anticipation has kept up his strength for months past, but now he's—"

With a cry, the girl fled.

Alstair swung upon Jack. "I take back nothing," he snapped. "You're an officer, by order of the commander. But you're a Mut besides, and when I'm commander of the *Adastra* you don't stay an officer long! I'm warning you! What were you doing here?"

Jack was deathly pale, but the status of officer on the *Adastra,* with its consequent opportunity of seeing Helen, was far too precious to be given up unless at the last ex-

tremity. And, besides, there was the work he had in hand. His work, certainly, could not continue unless he remained an officer.

"I was installing an interference grid on the surface," he said, "to try to discover the sending station of the messages we've been getting. It will also act, as you know, as an inductor up to a certain range, and in its range is a good deal more accurate than the main inductors of the ship."

"Then get to your damned work," said Alstair harshly, "and pay full attention to it and less to romance!"

Jack plugged in the lead wire from his new grid to the pan-wave receptor. For an hour he worked more and more grimly. There was something very wrong. The inductors showed blank for all about the *Adastra*. The interference grid showed an object of considerable size not more than two million miles distant and to one side of the *Adastra's* course. Suddenly, all indication of that object's existence blanked out. Every dial on the panwave receptor went back to zero.

"Damnation!" said Jack under his breath.

He set up a new pattern on the controls, calculated a moment and deliberately changed the pattern on the spare bank of the main inductors, and then simultaneously switched both instruments to their new frequencies. He waited, almost holding his breath, for nearly half a minute. It would take so long for the inductor waves of the new frequency to reach out the two million miles and then collapse into the analyzers and give their report of any object in space which had tended to deform them.

Twenty-six, twenty-seven, twenty-eight seconds. Every alarm bell on the monstrous ship clanged furiously! Emergency doors hissed into place all over the vessel, converting every doorway into an air lock. Seconds later, the visiplates in the main control room began to flash alight.

"Reporting, Rocket Control!" "Reporting, Air Service!" "Reporting, Power Supply!"

Jack said crisply: "The main inductors report an object two million miles distant with velocity in our direction. The commander is ill. Please find Vice Commander Alstair."

Then the door of the control room burst open and Alstair himself raged into the room.

"What the devil!" he gasped. "Ringing a general alarm? Have you gone mad? The inductors—"

Jack pointed to the main inductor bank. Every dial bore out the message of the still-clanging alarms. Alstair stared blankly at them. As he looked, every dial went back to zero.

And Alstair's face went as blank as the dials.

"They felt out our inductor screens," said Jack grimly, "and put out some sort of radiation which neutralized them. So I set up two frequencies, changed both, and they couldn't adjust their neutralizers in time to stop our alarms."

Alstair stood still, struggling with the rage which still possessed him. Then he nodded curtly.

"Quite right. You did good work. Stand by."

And, quite cool and composed, he took command of the mighty space ship, even if there was not much for him to do. In five minutes, in fact, every possible preparation for emergency had been made and he turned again to Jack.

"I don't like you," he said coldly. "As one man to another, I dislike you intensely. But as vice commander and acting commander at the moment, I have to admit that you did good work in uncovering this little trick of our friends to get within striking distance without our knowing they were anywhere near."

Jack said nothing. He was frowning, but it was because he was thinking of Helen. The *Adastra* was huge and powerful, but she was not readily maneuverable. She was enormously massive, but she could not be used for ramming. And she possessed within herself almost infinite destructiveness, in the means of producing Caldwell fields for the disintegration of matter, but she contained no weapon more dangerous than a two-thousand-kilowatt vortex gun for the destruction of dangerous animals or vegetation where she might possibly land.

"What's your comment?" demanded Alstair shortly. "How do you size up the situation?"

"They act as if they're planning hostilities," replied Jack briefly, "and they've got four times our maximum acceleration so we can't get away. With that acceleration they ought to be more maneuverable, so we can't dodge them. We've no faintest idea of what weapons they carry, but we know that we can't fight them unless their weapons are very puny indeed. There's just one chance that I can see."

"What's that?"

"They tried to slip up on us. That looks as if they intended to open fire without warning. But maybe they are

frightened and only expected to examine us without our getting a chance to attack them. In that case, our only bet is to swing over our signaling beam to the space ship. When they realize we know they're there and still aren't getting hostile, they may not guess we can't fight. They may think we want to be friendly and they'd better not start anything with a ship our size that's on guard."

"Very well. You're detailed to communication duty," said Alstair. "Go ahead and carry out that program. I'll consult the rocket engineers and see what they can improvise in the way of fighting equipment. Dismiss!"

His tone was harsh. It was arrogant. It rasped Jack's nerves and made him bristle all over. But he had to recognize that Alstair wasn't letting his frank dislike work to the disadvantage of the ship. Alstair was, in fact, one of those ambitious officers who are always cordially disliked by everybody, at all times, until an emergency arises. Then their competence shows up.

Jack went to the communications-control room. It did not take long to realign the transmitter beam. Then the sender began to repeat monotonously the recorded last message from the *Adastra* to the distant and so far unidentified planet of the ringed star. And while the signal went out, over and over again, Jack called on observations control for a sight of the strange ship.

They had a scanner on it now and by stepping up illumination to the utmost, and magnification to the point where the image was as rough as an old-fashioned half-tone cut, they brought the strange ship to the visiplate as a six-inch miniature.

It was egg-shaped and perfectly smooth. There was no sign of external girders, of protruding atmospheric-navigation fins, of escape-boat blisters. It was utterly featureless save for tiny spots which might be portholes, and rocket tubes in which intermittent flames flickered. It was still decelerating to match the speed and course of the *Adastra*.

"Have you got a spectroscope report on it?" asked Jack.

"Yeh," replied the observations orderly. "An' I don't believe it. They're using fuel rockets—some organic compound. An' the report says the hull of that thing is cellulose, not metal. It's wood, on the outside."

Jack shrugged. No sign of weapons. He went back to his own job. The space ship yonder was being penetrated through and through by the message waves. Its receptors

could not fail to be reporting that a tight beam was upon it, following its every movement, and that its presence and probable mission were therefore known to the mighty ship from out of space.

But Jack's own receptors were silent. The tape came out of them utterly blank. No—a queer, scrambled, blurry line, as if the analyzers were unable to handle the frequency which was coming through. Jack read the heat effect. The other space ship was sending with a power which meant five thousand kilowatts pouring into the *Adastra.* Not a signal. Grimly, Jack heterodyned the wave on a five-meter circuit and read off its frequency and type. He called the main control.

"They're pouring short stuff into us," he reported stiffly to Alstair. "About five thousand kilowatts of thirty-centimeter waves, the type we use on Earth to kill weevils in wheat. It ought to be deadly to animal life, but of course our hull simply absorbs it."

Helen. Impossible to stop the *Adastra.* They'd started for Proxima Centauri. Decelerating though they were, they couldn't check much short of the solar system, and they were already attacked by a ship with four times their greatest acceleration. Pouring a deadly frequency into them—a frequency used on Earth to kill noxious insects. Helen was—

The G. C. phone snapped suddenly, in Alstair's voice.

"Attention, all officers! The enemy space ship has poured what it evidently considers a deadly frequency into us, and is now approaching at full acceleration! Orders are that absolutely no control of any sort is to be varied by a hair's breadth. Absolutely no sign of living intelligence within the *Adastra* is to be shown. You will stand by all operative controls, prepared for maneuver if it should be necessary. But we try to give the impression that the *Adastra* is opening on automatic controls alone! Understand?"

Jack could imagine the reports from the other control rooms. His own receptor sprang suddenly into life. The almost hooted sounds of the call signal, so familiar that they seemed words. Then an extraordinary jumble of noises—words in a human voice. More stridulent sounds. More words in perfectly accurate English. The English words were in the tones and accents of an officer of the *Adastra,* plainly recorded and retransmitted.

"Communications!" snapped Alstair. "You will not answer

this signal! It is an attempt to find out if we survived their ray attack!"

"Check," said Jack.

Alstair was right. Jack watched and listened as the receptor babbled on. It stopped. Silence for ten minutes. It began again. The *Adastra* hurtled on. The babble from space came to an end. A little later the G. C. phone snapped once more:

"The enemy space ship has increased its acceleration, evidently convinced that we are all dead. It will arrive in approximately four hours. Normal watches may be resumed for three hours unless an alarm is given."

Jack leaned back in his chair, frowning. He began to see the tactics Alstair planned to use. They were bad tactics, but the only ones a defenseless ship like the *Adastra* could even contemplate. It was at least ironic that the greeting the *Adastra* received at the end of a seven-years' voyage through empty space be a dose of a type of radiation used on Earth to exterminate vermin.

But the futility of this attack did not mean that all attacks would be similarly useless. And the *Adastra* simply could not be stopped for many millions of miles, yet. Even if Alstair's desperate plan took care of this particular assailant and this particular weapon, it would not mean—it could not!—that the *Adastra* or the folk within had any faintest chance of defending themselves. And there was Helen. . . .

III

The visiplates showed the strange space ship clearly now, even without magnification. It was within five miles of the *Adastra* and it had stopped. Perfectly egg-shaped, without any protuberance whatever except the rocket tubes in its rear, it hung motionless with relation to the Earth ship, which meant that its navigators had analyzed her rate of deceleration long since and had matched all the constants of her course with precision.

Helen, her face still tear-streaked, watched as Jack turned up the magnification, and the illumination with it. Her father had collapsed very suddenly and very completely. He was resting quietly now, dozing almost continuously, with his face wearing an expression of utter contentment.

He had piloted the *Adastra* to its first contact with the

civilization of another solar system. His lifework was done and he was wholly prepared to rest. He had no idea, of course, that the first actual contact with the strange space ship was a burst of short waves of a frequency deadly to all animal life.

The space ship swelled on the visiplate as Jack turned the knob. He brought it to an apparent distance of a few hundred yards only. With the illumination turned up, even the starlight on the hull would have been sufficient to show any surface detail. But there was literally none. No rivet, no bolt, no line of joining plates. A row of portholes were dark and dead within.

"And it's wood!" repeated Jack. "Made out of some sort of cellulose which stands the cold of space!"

Helen said queerly, "It looks to me as if it had been grown, rather than built."

Jack blinked. He opened his mouth as if to speak, but the receptor at his elbow suddenly burst into the hootlike stridulations which were the signals from the egglike ship. Then English words, from recordings of previous signals from the *Adastra.* More vowelless, modulated phrases. It sounded exactly as if the beings in the other space ship were trying urgently to open communication and were insisting that they had the key to the *Adastra's* signals. The temptation to reply was great.

"They've got brains, anyhow," said Jack.

The signals were cut off. Silence. Jack glanced at the wave tape. It showed the same blurring as before.

"More short stuff. At this distance, it ought not only to kill us, but even sterilize the interior of the whole ship. Lucky our hull is heavy alloy with a high hysteresis-rate. Not a particle of that radiation can get through."

Silence for a long, long time. The wave tape showed that a terrific beam of thirty-centimeter waves continued to play upon the *Adastra.* Jack suddenly plugged in observations and asked a question. Yes, the outer hull was heating. It had gone up half a degree in fifteen minutes.

"Nothing to worry about in that," grunted Jack. "Fifteen degrees will be the limit they can put it up, with this power."

The tape came out clear. The supposed death radiation was cut off. The egg-shaped ship darted forward. And then for twenty minutes or more Jack had to switch from one outside vision disk to another to keep it in sight. It hovered

about the huge bulk of the *Adastra* with a wary inquisitiveness. Now half a mile away, now no more than two hundred yards, the thing darted here and there with an amazing acceleration and as amazing a braking power. It had only the rocket tubes at the smaller end of its egg-shaped form. It was necessary for it to fling its whole shape about to get a new direction, and the gyroscopes within it must have been tremendously powerful. Even so, the abruptness of its turns were startling.

"I wouldn't like to be inside that thing!" said Jack. "We'd be crushed to a pulp by their normal navigation methods. They aren't men like us. They can stand more than we can."

The thing outside seemed sentient, seemed alive. And by the eagerness of its movements it seemed the more horrible, flitting about the gigantic space ship it now believed was a monstrous coffin.

It suddenly reversed itself and shot back toward the *Adastra*. Two hundred yards, one hundred yards, a hundred feet. It came to a cushioned stop against the surface of the Earth vessel.

"Now we'll see something of them," said Jack crisply. "They landed right at an air lock. They know what that is, evidently. Now we'll see them in their space suits."

But Helen gasped. A part of the side of the strange ship seemed to swell suddenly. It bulged out like a blister. It touched the surface of the *Adastra*. It seemed to adhere. The point of contact grew larger.

"Good Lord!" said Jack blankly. "Is it alive? And is it going to try to eat our ship?"

The general-communication phone rasped sharply: "Officers with arms to the air lock GH41 immediately! The Centaurians are opening the air lock from the outside. Wait orders there! The visiplate in the air lock is working and you will be informed. Go ahead!"

The phone clicked off. Jack seized a heavy gun, one of the force rifles which will stun a man at anything up to eighteen hundred yards and kill at six, when used at full power. His side arm hung in its holster. He swung for the door.

"Jack!" said Helen desperately.

He kissed her. It was the first time their lips had touched, but it seemed the most natural thing in the world, just then. He went racing down the long corridors of the *Adastra* to the rendezvous. And as he raced, his thoughts were not at all those of a scientist and an officer of Earth's first expedi-

tion into interstellar space. Jack was thinking of Helen's lips touching his desperately, of her soft body pressed close to him.

A G. C. speaker whispered overhead as he ran. "They're inside the air lock. They opened it without trouble. They're testing our air, now. Apparently it suits them all."

The phone fell behind. Jack ran on, panting. Somebody else was running ahead. There were half a dozen, a dozen men grouped at the end of the corridor. A murmur from the side wall.

". . . rking at the inner air lock door. Only four or five of them, apparently, will enter the ship. They are to be allowed to get well away from the air lock. You will keep out of sight. When the emergency locks go on, it will be your signal. Use your heavy force guns, increasing power from minimum until they fall paralyzed. It will probably take a good deal of power to subdue them. They are not to be killed if it can be avoided. Ready!"

There were a dozen or more officers on hand. The fat rocket chief. The lean air officer. Subalterns of the other departments. The rocket chief puffed audibly as he wedged himself out of sight. Then the clicking of the inner air lock door. It opened into the anteroom. Subdued, muffled hootings came from that door. The Things—whatever they were—were inspecting the space suits there. The hootings were distinctly separate and distinctly intoned. But they suddenly came as a babble. More than one Thing was speaking at once. There was excitement, eagerness, an extraordinary triumph in these voices.

Then something stirred in the doorway of the air lock anteroom. A shadow crossed the threshold. And then the Earthmen saw the creatures who were invading the ship.

For an instant they seemed almost like men. They had two legs, and two dangling things—tentacles—which apparently served as arms and tapered smoothly to ends which split into movable, slender filaments. The tentacles and the legs alike seemed flexible in their entire lengths. There were no "joints" such as men use in walking, and the result was that the Centaurians walked with a curiously rolling gait.

Most startling, though, was the fact that they had no heads. They came wabbling accustomedly out of the air lock, and at the end of one "arm" each carried a curious, semicylindrical black object which they handled as if it might be a weapon. They wore metallic packs fastened to their bodies.

The bodies themselves were queerly "grained." There was a tantalizing familiarity about the texture of their skin.

Jack, staring incredulously, looked for eyes, for nostrils, for a mouth. He saw twin slits only. He guessed at them for eyes. He saw no sign of any mouth at all. There was no hair. But he saw a scabrous, brownish substance on the back of one of the Things which turned to hoot excitedly at the rest. It looked like bark, like tree bark. And a light burst upon Jack. He almost cried out, but instead reached down and quietly put the lever of his force gun at full power at once.

The Things moved on. They reached a branching corridor and after much arm waving and production of their apparently articulated sounds they separated into two parties. They vanished. Their voices dwindled. The signal for an attack upon them had not yet been given. The officers, left behind, stirred uneasily. But a G. C. phone whispered.

"Steady! They think we're all dead. They're separating again. We may be able to close emergency doors and have each one sealed off from all the rest and then handle them in detail. You men watch the air lock!"

Silence. The humming of a ventilator somewhere near by. Then, suddenly, a man screamed shrilly a long distance off, and on the heels of his outcry there came a new noise from one of the Things. It was a high-pitched squealing noise, triumphant and joyous and unspeakably horrible.

Other squealings answered it. There were rushing sounds, as if the other Things were running to join the first. And then came a hissing of compressed air and a hum of motors. Doors snapped shut everywhere, sealing off every part of the ship from every other part. And in the dead silence of their own sealed compartment, the officers on guard suddenly heard inquiring hoots.

Two more of the Things came out the air lock. One of the men moved. The Thing saw him and turned its half-cylindrical object upon him. The man—it was the communications officer—shrieked suddenly and leaped convulsively. He was stone dead even as his muscles tensed for that incredible leap.

And the Thing emitted a high-pitched, triumphant note which was exactly like the other horrible sound they had heard, and sped eagerly toward the body. One of the long, tapering arms lashed out and touched the dead man's hand.

Then Jack's force gun began to hum. He heard another and another open up. In seconds the air was filled with a sound like that of a hive of angry bees. Three more of the

Things came out of the air lock, but they dropped in the barrage of force-gun beams. It was only when there was a sudden rush of air toward the lock, showing that the enemy ship had taken alarm and was darting away, that the men dared cease to fill that doorway with their barrage. Then it was necessary to seal the air lock in a hurry. Only then could they secure the Things that had invaded the *Adastra.*

Two hours later, Jack went into the main control room and saluted with an exact precision. His face was rather white and his expression entirely dogged and resolved. Alstair turned to him, scowling.

"I sent for you," he said harshly, "because you're likely to be a source of trouble. The commander is dead. You heard it?"

"Yes, sir," said Jack. "I heard it."

"In consequence, I am commander of the *Adastra,*" said Alstair provocatively. "I have, you will recall, the power of life and death in cases of mutinous conduct, and it is also true that marriage on the *Adastra* is made legal only by executive order bearing my signature."

"I am aware of the fact, sir," said Jack.

"Very well," said Alstair deliberately. "For the sake of discipline, I order you to refrain from all association with Miss Bradley. I shall take disobedience of the order as mutiny. I intend to marry her myself. What have you to say to that?"

Jack said as deliberately, "I shall pay no attention to the order, sir, because you aren't fool enough to carry out such a threat! Are you such a fool that you don't see we've less than one chance in five hundred of coming out of this? If you want to marry Helen, you'd better put all your mind on giving her a chance to live!"

A savage silence held for a moment. The two men glared furiously at each other, the one near middle age, the other still a young man, indeed. Then Alstair showed his teeth in a smile that had no mirth whatever in it.

"As man to man I dislike you extremely," he said harshly. "But as commander of the *Adastra* I wish I had a few more like you. We've had seven years of routine on this damned ship, and every officer in quarters is rattled past all usefulness because an emergency has come at last. They'll obey orders, but there's not one fit to give them. The communications officer was killed by one of those devils, wasn't he?"

"Yes, sir."

"Very well. You're brevet communications officer. I hate your guts, Gary, and I do not doubt that you hate mine, but you have brains. Use them now. What have you been doing?"

"Adjusting a dictawriter, sir, to get a vocabulary of one of these Centaurian's speech, and hooking it up as a two-way translator, sir."

Alstair stared in momentary surprise, and then nodded. A dictawriter, of course, simply analyzes a word into its phonetic parts, sets up the analysis and picks out a card to match its formula. Normally, the card then actuates a printer. However, instead of a type-choosing record, the card can contain a record of an equivalent word in another language, and then operates a speaker.

Such machines have been of only limited use on Earth because of the need for so large a stock of vocabulary words, but have been used to some extent for literal translations both of print and speech. Jack proposed to record a Centaurian's vocabulary with English equivalents, and the dictawriter, hearing the queer hoots the strange creature uttered, would pick out a card which would then cause a speaker to enunciate its English synonym.

The reverse, of course, would also occur. A conversation could be carried on with such a prepared vocabulary without awaiting practice in understanding or imitating the sounds of another language.

"Excellent!" said Alstair curtly. "But put some one else on the job if you can. It should be reasonably simple, once it's started. But I need you for other work. You know what's been found out about these Centaurians, don't you?"

"Yes, sir. Their hand weapon is not unlike our force guns, but it seems to be considerably more effective. I saw it kill the communications officer."

"But the creatures themselves!"

"I helped tie one of them up."

"What do you make of it? I've a physician's report, but he doesn't believe it himself!"

"I don't blame him, sir," said Jack grimly. "They're not our idea of intelligent beings at all. We haven't any word for what they are. In one sense they're plants, apparently. That is, their bodies seem to be composed of cellulose fibers where ours are made of muscle fibers. But they are intelligent, fiendishly intelligent.

"The nearest we have to them on Earth are certain carnivorous plants, like pitcher plants and the like. But they're as

far above a pitcher plant as a man is above a sea anemone, which is just as much an animal as a man is. My guess, sir, would be that they're neither plant nor animal. Their bodies are built up of the same materials as earthly plants, but they move about like animals do on Earth. They surprise us, but we may surprise them, too. It's quite possible that the typical animal form on their planet is sessile like the typical plant form on ours."

Alstair said bitterly: "And they look on us, animals, as we look on plants!"

Jack said without expression: "Yes, sir. They eat through holes in their arms. The one who killed the communications officer seized his arm. It seemed to exude some fluid that liquefied his flesh instantly. It sucked the liquid back in at once. If I may make a guess, sir—"

"Go ahead," snapped Alstair. "Everybody else is running around in circles, either marveling or sick with terror."

"The leader of the party, sir, had on what looked like an ornament. It was a band of leather around one of its arms."

"Now, what the devil—"

"We had two men killed. One was the communications officer and the other was an orderly. When we finally subdued the Centaurian who'd killed that orderly, it had eaten a small bit of him, but the rest of the orderly's body had undergone some queer sort of drying process, from chemicals the Thing seemed to carry with it."

Alstair's throat worked as if in nausea. "I saw it."

"It's a fanciful idea," said Jack grimly, "but if a man were in the position of that Centaurian, trapped in a space ship belonging to an alien race, with death very probably before him, well, about the only thing man would strap to his body, as the Centaurian did the dried, preserved body of that orderly—"

"Would be gold," snapped Alstair. "Or platinum, or jewels which he would hope to fight clear with!"

"Just so," said Jack. "Now, I'm only guessing, but those creatures are not human, nor even animals. Yet they eat animal food. They treasure animal food as a human being would treasure diamonds. An animal's remains—leather—they wear as an ornament. It looks to me as if animal tissue was rather rare on their planet, to be valued so highly. In consequence—"

Alstair stood up, his features working. "Then our bodies would be the same as gold to them! As diamonds! Gary, we

haven't the ghost of a chance to make friends with these fiends!"

Jack said dispassionately, "No; I don't think we have. If a race of beings with tissues of metallic gold landed on Earth, I rather think they'd be murdered. But there's another point, too. There's Earth. From our course, these creatures can tell where we came from, and their space ships are rather good. I think I'll put somebody else on the dictawriter job and see if I can flash a message back home. No way to know whether they get it, but they ought to be watching for one by the time it's there. Maybe they've improved their receptors. They intended to try, anyhow."

"Men could meet these creatures' ships in space," said Alstair harshly, "if they were warned. And guns might answer, but if they didn't handle these devils, Caldwell torpedoes would. Or a suicide squad, using their bodies for bait. We're talking like dead men, Gary."

"I think, sir," said Jack, "we are dead men." Then he added, "I shall put Helen Bradley on the dictawriter, with a guard to handle the Centaurian. He'll be bound tightly."

The statement tacitly assumed that Alstair's order to avoid her was withdrawn. It was even a challenge to him to repeat it. And Alstair's eyes glowed and he controlled himself with difficulty.

"Damn you, Gary," he said savagely, "get out!"

He turned to the visiplate which showed the enemy ship as Jack left the control room.

The egg-shaped ship was two thousand miles away now, and just decelerating to a stop. In its first flight it had rocketed here and there like a mad thing. It would have been impossible to hit it with any projectile, and difficult in the extreme even to keep radiation on it in anything like a tight beam. Now, stopped stock-still with regard to the *Adastra,* it hung on, observing, very probably devising some new form of devilment. So Alstair considered, anyhow. He watched it somberly.

The resources of the *Adastra,* which had seemed so vast when she took off from Earth, were pitifully inadequate to handle the one situation which had greeted her, hostility. She could have poured out the treasures of man's civilization to the race which ruled this solar system. Savages, she could have uplifted. Even to a race superior to men she could have offered man's friendship and eager pupilage. But these creatures—

The space ship stayed motionless. Probably signaling back to its home planet, demanding orders. Reports came in to the *Adastra's* main control room and Alstair read them. The Centaurians were unquestionably extracting carbon dioxide from the air. That compound was to their metabolism what oxygen is to men, and in pure air they could not live.

But their metabolic rate was vastly greater than that of any plant on Earth. It compared with the rate of earthly animals. They were not plants by any definition save that of constitution, as a sea anemone is not an animal except by the test of chemical analysis.

The Centaurians had a highly organized nervous system, the equivalent of brains, and both great intelligence and a language. They produced sounds by a stridulating organ in a special body cavity. And they felt emotion.

A captive creature when presented with various objects showed special interest in machinery, showing an acute realization of the purpose of a small sound recorder and uttering into it an entire and deliberate series of sounds. Human clothing it fingered eagerly. Cloth it discarded, when of cotton or rayon, but it displayed great excitement at the feel of a woolen shirt and even more when a leather belt was given to it. It placed the belt about its middle, fastening the buckle without a fumble after a single glance at its working.

It unraveled a thread from the shirt and consumed it, rocking to and fro as if in ecstasy. When meat was placed before it, it seemed to become almost delirious with excitement. A part of the meat it consumed instantly, to ecstatic swayings. The rest it preserved by a curious chemical process, using substances from a small metal pack it had worn and for which it made gestures.

Its organs of vision were behind two slits in the upper part of its body, and no precise examination of the eyes themselves had been made. But the report before Alstair said specifically that the Centaurian displayed an avid eagerness whenever it caught sight of a human being. And that the eagerness was not of a sort to be reassuring.

It was the sort of excitement—only much greater—which it had displayed at the sight of wool and leather. As if by instinct, said the report, the captive Centaurian had several times made a gesture as if turning some weapon upon a human when first it sighted him.

Alstair read this report and others. Helen Bradley reported barely two hours after Jack had assigned her to the work.

"I'm sorry, Helen," said Alstair ungraciously. "You shouldn't have been called on for duty. Gary insisted on it. I'd have left you alone."

"I'm glad he did," said Helen steadily. "Father is dead, to be sure, but he was quite content. And he died before he found out what these Centaurians are like. Working was good for me. I've succeeded much better than I even hoped. The Centaurian I worked with was the leader of the party which invaded this ship. He understood almost at once what the dictawriter was doing, and we've a good vocabulary recorded already. If you want to talk to him, you can."

Alstair glanced at the visiplate. The enemy ship was still motionless. Easily understandable, of course. The *Adastra's* distance from Proxima Centauri could be measured in hundreds of millions of miles, now, instead of millions of millions, but in another terminology it was light-hours away still. If the space ship had signaled its home planet for orders, it would still be waiting for a reply.

Alstair went heavily to the biology laboratory, of which Helen was in charge, just as she was in charge of the biological specimens—rabbits, sheep, and a seemingly endless array of small animals—which on the voyage had been bred for a food supply and which it had been planned to release should a planet suitable for colonizing revolve about the ringed star.

The Centaurian was bound firmly to a chair with a myriad of cords. He—she—it was utterly helpless. Beside the chair the dictawriter and its speaker were coupled together. From the Centaurian came hooted notes which the machine translated with a rustling sound between words.

"You—are—commander—this—ship?" the machine translated without intonation.

"I am," said Alstair, and the machine hooted musically.

"This—woman—man—dead," said the machine tonelessly again, after more sounds from the extraordinary living thing which was not an animal.

Helen interjected swiftly: "I told him my father was dead."

The machine went on: "I—buy—all—dead—man—on—ship—give—metal—gold—you—like—"

Alstair's teeth clicked together. Helen went white. She tried to speak, and choked upon the words.

"This," said Alstair in mirthless bitterness, "is the beginning of the interstellar friendship we hoped to institute!"

Then the G. C. phone said abruptly:

"Calling Commander Alstair! Radiation from ahead! Several wave lengths, high intensity! Apparently several space ships are sending, though we can make out no signals!"

And then Jack Gary came into the biology laboratory. His face was set in grim lines. It was very white. He saluted with great precision.

"I didn't have to work hard, sir," he said sardonically. "The last communications officer had been taking his office more or less as a sinecure. We'd had no signals for seven years, and he didn't expect any. But they're coming through and have been for months.

"They left Earth three years after we did. A chap named Callaway, it seems, found that a circularly polarized wave makes a tight beam that will hold together forever. They've been sending to us for years past, no doubt, and we're getting some of the first messages now.

"They've built a second *Adastra,* sir, and it's being manned —hell, no! It was manned four years ago! It's on the way out here now! It must be at least three years on the way, and it has no idea of these devils waiting for it. Even if we blow ourselves to bits, sir, there'll be another ship from Earth coming, unarmed as we are, to run into these devils when it's too late to stop—"

The G. C. phone snapped again:

"Commander Alstair! Observations reporting! The external hull temperature has gone up five degrees in the past three minutes and is still climbing. Something's pouring heat into us at a terrific rate!"

Alstair turned to Jack. He said with icy politeness, "Gary, after all there's no use in our continuing to hate each other. Here is where we all die together. Why do I still feel inclined to kill you?"

But the question was rhetorical only. The reason was wholly clear. At the triply horrible news, Helen had begun to cry softly. And she had gone blindly into Jack's arms to do it.

IV

The situation was, as a matter of fact, rather worse than the first indications showed. The external hull temperature, for instance, was that of the generalizing thermometer, which averaged for all the external thermometers. A glance at the thermometer bank, through a visiphone connection, showed

the rearmost side of the *Adastra* at practically normal. It was the forward hemisphere, the side nearest Proxima Centauri, which was heating. And that hemisphere was not heating equally. The indicators which flashed red lights were closely grouped.

Alstair regarded them with a stony calm in the visiplate. "Squarely in the center of our disk, as they see it," he said icily. "It will be that fleet of space ships, of course."

Jack Gary said crisply: "Sir, the ship from which we took prisoners made contact several hours earlier than we expected. It must be that, instead of sending one vessel with a transmitter on board, they sent a fleet, and a scout ship on ahead. That scout ship has reported that we laid a trap for some of her crew, and consequently they've opened fire!"

Alstair said sharply, into a G. C. transmitter, "Sector G90 is to be evacuated at once. It is to be sealed off immediately and all occupants will emerge from air locks. Adjoining sectors are to be evacuated except by men on duty, and they will don space suits immediately."

He clicked off the phone and added calmly, "The external temperature over part of G90 is four hundred degrees now. Dull-red heat. In five minutes it should melt. They'll have a hole bored right through us in half an hour."

Jack said urgently, "Sir! I'm pointing out that they've attacked because the scout ship reported we laid a trap for some of its crew! We have just the ghost of a chance—"

"What?" demanded Alstair bitterly. "We've no weapons!"

"The dictawriter, sir!" snapped Jack. "We can talk to them now!"

Alstair said harshly, "Very well, Gary. I appoint you ambassador. Go ahead!"

He swung on his heel and went swiftly from the control room. A moment later his voice came out of the G. C. phone: "Calling the Rocket Chief! Report immediately on personal visiphone. Emergency!"

His voice cut off, but Jack was not aware of it. He was plugging in to communications and demanding full power on the transmission beam and a widening of its arc. He snapped one order after another and explained to Helen in swift asides.

She grasped the idea at once. The Centaurian in the biology laboratory was bound, of course. No flicker of expression could be discovered about the narrow slits which were his vision organs. But Helen—knowing the words of the vocabu-

lary cards—spoke quietly and urgently into the dictawriter microphone. Hootlike noises came out of the speaker in their place, and the Centaurian stirred. Sounds came from him in turn, and the speaker said woodenly, "I—speak—ship—planet. Yes."

And as the check-up came through from communications control, the eerie, stridulated, unconsonanted noises of his language filled the biology laboratory and went out on the widened beam of the main transmitter.

Ten thousand miles away the Centaurian scout ship hovered. The *Adastra* bored on toward the ringed sun which had been the goal of mankind's most daring expedition. From ten thousand miles she would have seemed a mere dot, but the telescopes of the Centaurians would show her every detail. From a thousand miles she would seem a toy, perhaps, intricately crisscrossed with strengthening members.

From a distance of a few miles only, though, her gigantic size could be realized fully. Five thousand feet in diameter, she dwarfed the hugest of those distant, unseen shapes in emptiness which made up a hostile fleet now pouring deadly beams upon her.

From a distance of a few miles, too, the effect of that radiation could be seen. The *Adastra's* hull was alloy steel; tough and necessarily with a high hysteresis rate. The alternating currents of electricity induced in that steel by the Centaurian radiation would have warmed even a copper hull. But the alloy steel grew hot. It changed color. It glowed faintly red over an area a hundred feet across.

A rocket tube in that area abruptly ceased to emit its purple, lambent flame. It had been cut off. Other rockets increased their power a trifle to make up for it. The dull red glow of the steel increased. It became carmine. Slowly, inxorably, it heated to a yellowish tinge. It became canary in color. It tended toward blue.

Vapor curled upward from its surface, streaming away from the tortured, melting surface as if drawn by the distant sun. That vapor grew thick; dazzlingly bright; a veritable cloud of metallic steam. And suddenly there was a violent eruption from the center of the *Adastra's* lighted hemisphere. The outer hull was melted through. Air from the interior burst out into the void, flinging masses of molten, vaporizing metal before it. It spread with an incredible rapidity, flaring instantly into the attenuated, faintly glowing mist of a comet's tail.

The visiplate images inside the *Adastra* grew dim. Stars paled ahead. The Earth ship had lost a part of her atmosphere and it fled on before her writhing. Already it had spread into so vast a space that its density was immeasurable, but it was still so much more dense than the infinite emptiness of space that it filled all the cosmos before the *Adastra* with a thinning nebulosity.

And at the edges of the huge gap in the big ship's hull, the thick metal bubbled and steamed, and the interior partitions began to glow with an unholy light of dull-red heat, which swiftly went up to carmine and began to turn faintly yellow.

In the main control room, Alstair watched bitterly until the visiplates showing the interior of section G90 fused. He spoke very calmly into the microphone before him.

"We've got less time than I thought," he said deliberately. "You'll have to hurry. It won't be sure at best, and you've got to remember that these devils will undoubtedly puncture us from every direction and make sure there's absolutely nothing living on board. You've got to work something out, and in a hurry, to do what I've outlined!"

A half-hysterical voice came back to him.

"But sir, if I cut the sonic vibrations in the rockets we'll go up in a flare! A single instant! The disintegration of our fuel will spread to the tubes and the whole ship will simply explode! It will be quick!"

"You fool!" snarled Alstair. "There's another ship from Earth on the way! Unwarned! And unarmed like we are! And from our course these devils can tell where we came from! We're going to die, yes! We won't die pleasantly! But we're going to make sure these fiends don't start out a space fleet for Earth! There's to be no euthanasia for us! We've got to make our dying do some good! We've got to protect humanity!"

Alstair's face, as he snarled into the visiplate, was not that of a martyr or a person making a noble self-sacrifice. It was the face of a man overawing and bullying a subordinate into obedience.

With a beam of radiation playing on his ship which the metal hull absorbed and transformed into heat, Alstair raged at this department and that. A second bulkhead went, and there was a second eruption of vaporized metal and incandescent gas from the monster vessel. Millions of miles away, a wide-flung ring of egg-shaped ships lay utterly motionless, giving no sign of life and looking like monsters asleep. But

from them the merciless beams of radiation sped out and focused upon one spot of the *Adastra's* hull, and it spewed forth frothing metal and writhing gases and now and again some still recognizable object which flamed and exploded as it emerged.

And within the innumerable compartments of the mighty ship, human beings reacted to their coming doom in manners as various as the persons themselves. Some screamed. A few of the more sullen members of the crew seemed to go mad, to become homicidal maniacs. Still others broke into the stores and proceeded systematically but in some haste to drink themselves comatose. Some women clutched their children and wept over them. And some of them went mad.

But Alstair's snarling, raging voice maintained a semblance of discipline in a few of the compartments. In a machine shop men worked savagely, cursing, and making mistakes as they worked, which made their work useless. The lean air officer strode about his domain, a huge spanner in his hand, and smote with a righteous anger at any sign of panic. The rocket chief, puffing, manifested an unexpected genius for sustained profanity, and the rockets kept their pale purple flames out in space without a sign of flickering.

But in the biology laboratory the scene was one of quiet, intense concentration. Bound to helplessness, the Centaurian, featureless and inscrutable, filled the room with its peculiar form of speech. The dictawriter rustled softly, senselessly analyzing each of the sounds and senselessly questing for vocabulary cards which would translate them into English wordings. Now and again a single card did match up. Then the machine translated a single word of the Centaurian's speech.

"—ship—" A long series of sounds, varying rapidly in pitch, in intensity, and in emphasis. "—men—" Another long series. "—talk men—"

The Centurian ceased to make its hootlike noises. Then, very carefully, it emitted new ones. The speaker translated them all. The Centaurian had carefully selected words recorded with Helen.

"He understands what we're trying to do," said Helen, very pale.

The machine said, "You—talk—machine—talk—ship."

Jack said quietly into the transmitter, "We are friends. We have much you want. We want only friendship. We have killed none of your men except in self-defense. We ask peace.

If we do not have peace, we will fight. But we wish peace."

He said under his breath to Helen, as the machine rustled and the speaker hooted, "Bluff, that war talk. I hope it works!"

Silence. Millions of miles away, unseen space ships aimed a deadly radiation in close, tight beams at the middle of the *Adastra's* disk. Quaintly enough, that radiation would have been utterly harmless to a man's body. It would have passed through, undetected.

But the steel of the Earth ship's hull stopped and absorbed it as eddy currents. The eddy currents became heat. And a small volcano vomited out into space the walls, the furnishing, the very atmosphere of the *Adastra* through the hole that the heat had made.

It was very quiet indeed in the biology laboratory. The receptor was silent. One minute. Two minutes. Three. The radio waves carrying Jack's voice traveled at the speed of light, but it took no less than ninety seconds for them to reach the source of the beams which were tearing the *Adastra* to pieces. And there was a time loss there, and ninety seconds more for other waves to hurtle thrugh space at one hundred and eighty-six thousand miles each second with the reply.

The receptor hooted unmusically. The dictawriter rustled softly. Then the speaker said without expression, "We—friends—now—no—fight—ships—come—to—take—you—planet."

And simultaneously the miniature volcano on the *Adastra's* hull lessened the violence of its eruption, and slowly its molten, bubbling edges ceased first to steam, and then to bubble, and from the blue-white of vaporizing steel they cooled to yellow, and then to carmine, and more slowly to a dull red, and more slowly still to the glistening, infinitely white metallic surface of steel which cools where there is no oxygen.

Jack said crisply into the control-room microphone, "Sir, I have communicated with the Centaurians and they have ceased fire. They say they are sending a fleet to take us to their planet."

"Very good," said Alstair's voice bitterly, "especially since nobody seems able to make the one contrivance that would do some good after our death. What next?"

"I think it would be a good idea to release the Centaurian here," said Jack. "We can watch him, of course, and paralyze

him if he acts up. It would be a diplomatic thing to do, I believe."

"You're ambassador," said Alstair sardonically. "We've got time to work, now. But you'd better put somebody else on the ambassadorial work and get busy again on the job of sending a message back to Earth, if you think you can adapt a transmitter to the type of wave they'll expect."

His image faded. And Jack turned to Helen. He felt suddenly very tired.

"That is the devil of it," he said drearily. "They'll expect a wave like they sent us, and with no more power than we have, they'll hardly pick up anything else! But we picked up in the middle of a message and just at the end of their description of the sending outfit they're using on Earth. Undoubtedly they'll describe it again, or rather they did describe it again, four years back, and we'll pick it up if we live long enough. But we can't even guess when that will be. You're going to keep on working with this—creature, building up a vocabulary?"

Helen regarded him anxiously. She put her hand upon his arm.

"He's intelligent enough," she said urgently. "I'll explain to him and let somebody else work with him. I'll come with you. After all, we—may not have long to be together."

"Perhaps ten hours," said Jack tiredly.

He waited, somberly, while she explained in carefully chosen words—which the dictawriter translated—to the Centaurian. She got an assistant and two guards. They released the headless Thing. It offered no violence. Instead, it manifested impatience to continue the work of building up in the translator files a vocabulary through which a complete exchange of ideas could take place.

Jack and Helen went together to the communications room. They ran the Earth message, as received so far. It was an extraordinary hodgepodge. Four years back, Earth had been enthusiastic over the thought of sending word to its most daring adventurers. A flash of immaterial energy could travel tirelessly through uncountable millions of millions of miles of space and overtake the explorers who had started three years before. By its text, this message had been sent some time after the first message of all. In the sending, it had been broadcast all over the Earth, and many millions of people undoubtedly had thrilled to the thought that they heard words which would span the space between two suns.

But the words were not helpful to those on the *Adastra*. The message was a "cheer-up" program, which began with lusty singing by a popular quartet, continued with wisecracks by Earth's most highly paid comedian—and his jokes were all very familiar to those on the *Adastra*—and then a congratulatory address by an eminent politician, and other drivel. In short, it was a hodgepodge of trash designed to gain publicity by means of the Earth broadcast for those who took part in it.

It was not helpful to those on the *Adastra*, with the hull of the ship punctured, death before them, and probably destruction for the whole human race to follow as a consequence of their voyage.

Jack and Helen sat quietly and listened, their hands clasped unconsciously. Rather queerly, the extreme brevity of the time before them made extravagant expressions of affection seem absurd. They listened to the unspeakably vulgar message from Earth without really hearing it. Now and again they looked at each other.

In the biology laboratory the building-up of a vocabulary went on swiftly. Pictures came into play. A second Centaurian was released, and by his skill in delineation—which proved that the eyes of the plant men functioned almost identically with those of Earth men—added both to the store of definitions and equivalents and to knowledge of the Centaurian civilization.

Piecing the information together, the civilization began to take on a strange resemblance to that of humanity. The Centaurians possessed artificial structures which were undoubtedly dwelling houses. They had cities, laws, arts—the drawing of the second Centaurian was proof of that—and sciences. The science of biology in particular was far advanced, taking to some extent the place of metallurgy in the civilization of men. Their structures were grown, not built. Instead of metals to shape to their own ends, they had forms of protoplasm whose rate and manner of growth they could control.

Houses, bridges, vehicles—even space ships were formed of living matter which was thrown into a quiescent nonliving state when it had attained the form and size desired. And it could be caused to become active again at will, permitting such extraordinary features as the blisterlike connection that had been made by the space ship with the hull of the *Adastra*.

So far, the Centaurian civilization was strange enough, but still comprehensible. Even men might have progressed in some such fashion and civilization developed on Earth from a different point of departure. It was the economics of the Centaurians which was both ununderstandable and horrifying to the men who learned of it.

The Centaurian race had developed from carnivorous plants, as men from carnivorous forebears. But at some early date in man's progression, the worship of gold began. No such diversion of interest occurred upon the planets of Proxima Centauri. As men have devastated cities for gold, and have cut down forests and gutted mines and ruthlessly destroyed all things for gold or for other things which could be exchanged for gold, so the Centaurians had quested animals.

As men exterminated the buffalo in America, to trade his hide for gold, so the Centaurians had ruthlessly exterminated the animal life of their planet. But to Centaurians, animal tissue itself was the equivalent of gold. From sheer necessity, ages since, they had learned to tolerate vegetable foodstuffs. But the insensate lust for flesh remained. They had developed methods for preserving animal food for indefinite periods. They had dredged their seas for the last and smallest crustacean. And even space travel became a desirable thing in their eyes, and then a fact, because telescopes showed them vegetation on other planets of their sun, and animal life as a probability.

Three planets of Proxima Centauri were endowed with climates and atmospheres favorable to vegetation and animal life, but only on one planet now, and that the smallest and most distant, did any trace of animal life survive. And even there the Centaurians hunted feverishly for the last and dwindling colonies of tiny quadrupeds which burrowed hundreds of feet below a frozen continent.

It became clear that the *Adastra* was an argosy of such treasure—in the form of human beings—as no Centaurian could ever have imagined to exist. And it became more than ever clear that a voyage to Earth would command all the resources of the race. Billions of human beings! Trillions of lesser animals! Uncountable creatures in the seas! All the Centaurian race would go mad with eagerness to invade this kingdom of riches and ecstasy, the ecstasy felt by any Centaurian when consuming the prehistoric foodstuff of his race.

V

Egg-shaped, featureless ships of space closed in from every side at once. The thermometer banks showed a deliberate, painstaking progression of alarm signals. One dial glowed madly red and faded, and then another, and yet another, as the Centaurian ships took up their positions. Each such alarm, of course, was from the momentary impact of a radiation beam on the *Adastra's* hull.

Twenty minutes after the last of the beams had proved the *Adastra's* helplessness, an egglike ship approached the Earth vessel and with complete precision made contact with its forward side above an air lock. Its hull bellied out in a great blister which adhered to the steel.

Alstair watched the visiplate which showed it, his face very white and his hands clenched tightly. Jack Gary's voice, strained and hoarse, came from the biology-laboratory communicator.

"Sir, a message from the Centaurians. A ship has landed on our hull and its crew will enter through the air lock. A hostile move on our part, of course, will mean instant destruction."

"There will be no resistance to the Centaurians," said Alstair harshly. "It is my order! It would be suicide!"

"Even so, sir," said Jack's voice savagely, "I still think it would be a good idea!"

"Stick to your duty!" rasped Alstair. "What progress has been made in communication?"

"We have vocabulary cards for nearly five thousand words. We can converse on nearly any subject, and all of them are unpleasant. The cards are going through a duplicator now and will be finished in a few minutes. A second dictawriter with the second file will be sent you as soon as the cards are complete."

In a visiplate, Alstair saw the headless figures of Centaurians emerging from the entrance to an air lock in the *Adastra's* hull.

"Those Centaurians have entered the ship," he snapped as an order to Jack. "You're communications officer! Go meet them and lead their commanding officer here!"

"Check!" said Jack grimly.

It sounded like a sentence of death, that order. In the

laboratory he was very pale indeed. Helen pressed close to him.

The formerly captive Centaurian hooted into the dictawriter, inquiringly. The speaker translated.

"What—command?"

Helen explained. So swiftly does humanity accustom itself to the incredible that it seemed almost natural to address a microphone and hear the hoots and stridulations of a nonhuman voice fill the room with her meaning.

"I—go—also—they—no—kill—yet."

The Centaurian rolled on before. With an extraordinary dexterity, he opened the door. He had merely seen it opened. Jack took the lead. His side-arm force gun remained in its holster beside him, but it was useless. He could probably kill the plant man behind him, but that would do no good.

Dim hootings ahead. The plant man made sounds—loud and piercing sounds. Answers came to him. Jack came in view of the new group of invaders. There were twenty or thirty of them, every one armed with half-cylindrical objects, larger than the first creatures had carried.

At sight of Jack there was excitement. Eager trembling of the armlike tentacles at either side of the headless trunks. There were instinctive, furtive moments of the weapons. A loud hooting as of command. The Things were still. But Jack's flesh crawled from the feeling of sheer, carnivorous lust that seemed to emanate from them.

His guide, the former captive, exchanged incomprehensible noises with the newcomers. Again a ripple of excitement in the ranks of the plant men.

"Come," said Jack curtly.

He led the way to the main control room. Once they heard some one screaming monotonously. A woman cracked under the coming of doom. A hooting babble broke the silence among the ungainly Things which followed Jack. Again an authoritative note silenced it.

The control room. Alstair looked like a man of stone, of marble, save that his eyes burned with a fierce and almost maniacal flame. A visiplate beside him showed a steady stream of Centaurians entering through a second air lock. There were hundreds of them, apparently. The dictawriter came in, under Helen's care. She cried out in instinctive horror at sight of so many of the monstrous creatures at once in the control room.

"Set up the dictawriter," said Alstair in a voice so harsh, so brittle that it seemed pure ice.

Trembling, Helen essayed to obey.

"I am ready to talk," said Alstair harshly into the dictawriter microphone.

The machine, rustling softly, translated. The leader of the new party hooted in reply. An order for all officers to report here at once, after setting all controls for automatic operation of the ship. There was some difficulty with the translation of the Centaurian equivalent of "automatic." It was not in the vocabulary file. It took time.

Alstair gave the order. Cold sweat stood out upon his face, but his self-control was iron.

A second order, also understood with a certain amount of difficulty. Copies of all technical records, and all—again it took time to understand—all books bearing on the construction of this ship were to be taken to the air lock by which these plant men had entered. Samples of machinery, generators, and weapons to the same destination.

Again Alstair gave the order. His voice was brittle, was even thin, but it did not falter or break.

The Centaurian leader hooted an order over which the dictawriter rustled in vain. His followers swept swiftly to the doors of the control room. They passed out, leaving but four of their number behind. And Jack went swiftly to Alstair. His force gun snapped out and pressed deep into the commander's middle. The Centaurians made no movement of protest.

"Damn you!" said Jack, his voice thick with rage. "You've let them take the ship! You plan to bargain for your life! Damn you, I'm going to kill you and fight my way to a rocket tube and send this ship up in a flare of clean flame that'll kill these devils with us!"

But Helen cried swiftly: "Jack! Don't! I know!"

Like an echo her words—because she was near the dictawriter microphone—were repeated in the hooting sounds of the Centaurian language. And Alstair, livid and near to madness, nevertheless said harshly in the lowest of tones:

"You fool! These devils can reach Earth, now they know it's worth reaching! So even if they kill every man on the ship but the officers—and they may—we've got to navigate to their planet and land there." His voice dropped to a rasping whisper and he raged almost soundlessly: "And if you think I want to live through what's coming, shoot!"

Jack stood rigid for an instant. Then he stepped back. A new respect and understanding dawned in his eyes.

"I beg your pardon, sir," he said unsteadily. "You can count on me hereafter."

One of the officers of the *Adastra* stumbled into the control room. Another. Still another. They trickled in. Six officers out of thirty.

A Centaurian entered with the curious rolling gait of his race. He went impatiently to the dictawriter and made noises.

"These—all—officers?" asked the machine tonelessly.

"The air officer shot his family and himself," gasped a subaltern of the air department. "A bunch of Muts charged a rocket tube and the rocket chief fought them off. Then he bled to death from a knife in his throat. The stores officer was—"

"Stop!" said Alstair in a thin, high voice. He tore at his collar. He went to the microphone and said thinly: "These are all the officers still alive. But we can navigate the ship."

The Centaurian—he wore a wide band of leather about each of his arms and another about his middle—waddled to the G. C. phone. The tendrils at the end of one arm manipulated the switch expertly. He emitted strange, formless sounds—and hell broke loose!

The visiplates all over the room emitted high-pitched, squealing sounds. They were horrible. They were ghastly. They were more terrible than the sounds of a wolf pack hard on the heels of a fear-mad deer. They were the sounds Jack had heard when one of the first invaders of the *Adastra* saw a human being and killed him instantly. And other sounds came out of the visiplates, too. There were human screams. There were even one or two explosions.

But then there was silence. The five Centaurians in the control room quivered and trembled. A desperate blood-lust filled them, the unreasoning, blind, instinctive craving which came of evolution from some race of carnivorous plants become capable of movement through the desperate need for food.

The Centaurian with the leather ornaments went to the dictawriter again. He hooted in it:

"Want—two—men—go—from—ship—learn—from—them—now."

There was an infinitely tiny sound in the main control room. It was a drop of cold sweat, falling from Alstair's face to the floor. He seemed to have shriveled. His face was an

ashy gray. His eyes were closed. But Jack looked steadily from one to the other of the surviving officers.

"That will mean vivisection, I suppose," he said harshly. "It's certain they plan to visit Earth, else—intelligent as they are—they wouldn't have wiped out everybody but us. Even for treasure. They'll want to try out weapons on a human body, and so on. Communications is about the most useless of all the departments now, sir. I volunteer."

Helen gasped: "No, Jack! No!"

Alstair opened his eyes. "Gary has volunteered. One more man to volunteer for vivisection." He said it in the choked voice of one holding to sanity by the most terrible of efforts. "They'll want to find out how to kill men. Their thirty-centimeter waves didn't work. They know the beams that melted our hull wouldn't kill men. I can't volunteer! I've got to stay with the ship!" There was despair in his voice. "One more man to volunteer for these devils to kill slowly!"

Silence. The happenings of the past little while, and the knowledge of what still went on within the *Adastra's* innumerable compartments, had literally stunned most of the six. They could not think. They were mentally dazed, emotionally paralyzed by the sheer horrors they had encountered.

Then Helen stumbled into Jack's arms. "I'm—going, too!" she gasped. "We're—all going to die! I'm not needed! And I can—die with Jack."

Alstair groaned. "Please!"

"I'm—going!" she panted. "You can't stop me! With Jack! Whither thou goest—"

Then she choked. She pressed close. The Centaurian of the leather belts hooted impatiently into the dictawriter.

"These—two—come."

Jack and Helen stood, hands clasped, momentarily dazed. The Centaurian of the leather bands hooted impatiently. He led them, with his queer, rolling gait, toward the air lock by which the plant men had entered. Three times they were seen by roving Things, which emitted that triply horrible shrill squeal. And each time the Centaurian of the leather bands hooted authoritatively and the plant men withdrew.

Once, too, Jack saw four creatures swaying backward and forward about something on the floor. He reached out his hands and covered Helen's eyes until they were past.

They came to the air lock. Their guide pointed through it. The man and the girl obeyed. Long, rubbery tentacles seized them and Helen gasped and was still. Jack fought

fiercely, shouting her name. Then something struck him savagely. He collapsed.

He came back to consciousness with a feeling of tremendous weight upon him. He stirred, and with his movement some of the oppression left him. A light burned, not a light such as men know on Earth, but a writhing flare which beat restlessly at the confines of a transparent globe which contained it. There was a queer smell in the air, too, an animal smell. Jack sat up. Helen lay beside him, unconfined and apparently unhurt. None of the Centaurians seemed to be near.

He chafed her wrists helplessly. He heard a stuttering sound and with each of the throbs of noise felt a momentary acceleration. Rockets, fuel rockets.

"We're on one of their damned ships!" said Jack to her. He felt for his force gun. It was gone.

Helen opened her eyes. She stared vaguely about. Her eyes fell upon Jack. She shuddered suddenly and pressed close to him.

"What—what happened?"

"We'll have to find out," replied Jack grimly.

The floor beneath his feet careened suddenly. Instinctively, he glanced at a porthole which until then he had only subconsciously noted. He gazed out into the utterly familiar blackness of space, illumined by very many tiny points of light which were stars. He saw a ringed sun and points of light which were planets.

One of those points of light was very near. Its disk was perceptible, and polar snow caps, and the misty alternation of greenish areas which would be continents with the indescribable tint which is ocean bottom when viewed from beyond a planet's atmosphere.

Silence. No hootings of that strange language without vowels or consonants which the Centaurians used. No sound of any kind for a moment.

"We're heading for that planet, I suppose," said Jack quietly. "We'll have to see if we can't manage to get ourselves killed before we land."

Then a murmur in the distance. It was a strange, muted murmur, in nothing resembling the queer notes of the plant men. With Helen clinging to him, Jack explored cautiously, out of the cubby-hole in which they had awakened. Silence save for that distant murmur. No movement anywhere. Another faint stutter of the rockets, with a distinct accelerative movement of the whole ship. The animal smell grew stronger.

They passed through a strangely shaped opening and Helen cried out:

"The animals!"

Heaped higgledy-piggledy were cages from the *Adastra,* little compartments containing specimens of each of the animals which had been bred for food, and which it had been planned to release if a planet suitable for the colonization revolved about Proxima Centauri. Farther on was an indescribable mass of books, machines, cases of all sorts—the materials ordered to be carried to the air lock by the leader of the plant men. Still no sign of any Centaurian.

But the muted murmur, quite incredibly sounding like a human voice, came from still farther ahead. Bewildered, now, Helen followed as Jack went still cautiously toward the source of the sound.

They found it. It came from a bit of mechanism cased in with the same lusterless, dull-brown stuff which composed the floor and walls and every part of the ship about them. And it was a human voice. More, it was Alstair's, racked and harsh and half hysterical.

"—you must have recovered consciousness by now, dammit, and these devils want some sign of it! They cut down your acceleration when I told them the rate they were using would keep you unconscious! Gary! Helen! Set off that signal!"

A pause. The voice again: "I'll tell it again. You're in a space ship these fiends are guiding by a tight beam which handles the controls. You're going to be set down on one of the planets which once contained animal life. It's empty now, unoccupied except by plants. And you and the space ship's cargo of animals and books and so on are the reserved, special property of the high archfiend of all these devils. He had you sent in an outside-controlled ship because none of his kind could be trusted with such treasure as you and the other animals!

"You're a reserve of knowledge, to translate our books, explain our science, and so on. It's forbidden for any other space ship than his own to land on your planet. Now will you send that signal? It's a knob right above the speaker my voice is coming out of. Pull it three times, and they'll know you're all right and won't send another ship with preservatives for your flesh lest a priceless treasure go to waste!"

The tinny voice—Centaurian receptors were not designed

to reproduce the elaborate phonetics of the human voice—laughed hysterically.

Jack reached up and pulled the knob, three times. Alstair's voice went on: "This ship is hell, now. It isn't a ship any more, but a sort of brimstone pit. There are seven of us alive, and we're instructing Centaurians in the operation of the controls. But we've told them that we can't turn off the rockets to show their inner workings, because to be started they have to have a planet's mass near by, for deformation of space so the reaction can be started. They're keeping us alive until we've shown them that. They've got some method of writing, too, and they write down everything we say, when it's translated by a dictawriter. Very scientific—"

The voice broke off.

"Your signal just came," it said an instant later. "You'll find food somewhere about. The air ought to last you till you land. You've got four more days of travel. I'll call back later. Don't worry about navigation. It's attended to."

The voice died again, definitely.

The two of them, man and girl, explored the Centaurian space ship. Compared to the *Adastra,* it was miniature. A hundred feet long, or more, by perhaps sixty feet at its greatest diameter. They found cubbyholes in which there was now nothing at all, but which undoubtedly at times contained the plant men packed tightly.

These rooms could be refrigerated, and it was probable that at a low temperature the Centaurians reacted like vegetation on Earth in winter and passed into a dormant, hibernating state. Such an arrangement would allow of an enormous crew being carried, to be revived for landing or battle.

"If they refitted the *Adastra* for a trip back to Earth on that basis," said Jack grimly, "they'd carry a hundred and fifty thousand Centaurians at least. Probably more."

The thought of an assault upon mankind by these creatures was an obsession. Jack was tormented by it. Womanlike, Helen tried to cheer him by their own present safety.

"We volunteered for vivisection," she told him pitifully, the day after their recovery of consciousness, "and we're safe for a while, anyhow. And—we've got each other—"

"It's time for Alstair to communicate again," said Jack harshly. It was nearly thirty hours after the last signing off. Centaurian routine, like Earth discipline on terrestrial space ships, maintained a period equal to a planet's daily rotation as the unit of time. "We'd better go listen to him."

They did. And Alstair's racked voice came from the queerly shaped speaker. It was more strained, less sane, than the day before. He told them of the progress of the Things in the navigation of the *Adastra*. The six surviving officers already were not needed to keep the ship's apparatus functioning. The air-purifying apparatus in particular was shut off, since in clearing the air of carbon dioxide it tended to make the air unbreathable for the Centaurians.

The six men were now permitted to live that they might satisfy the insatiable desire of the plant men for information. They lived a perpetual third degree, with every resource of their brains demanded for record in the weird notation of their captors. The youngest of the six, a subaltern of the air department, went mad under the strain alike of memory and of anticipation. He screamed senselessly for hours, and was killed and his body promptly mummified by the strange, drying chemicals of the Centaurians. The rest were living shadows, starting at a sound.

"Our deceleration's been changed," said Alstair, his voice brittle. "You'll land just two days before we settle down, on the planet these devils call home. Queer they've no colonizing instinct. Another one of us is about to break, I think. They've taken away our shoes and belts now, by the way. They're leather. We'd take a gold band from about a watermelon, wouldn't we? Consistent, these—"

And he raged once, in sudden hysteria, "I'm a fool! I sent you two off together while I'm living in hell! Gary, I order you to have nothing to do with Helen! I order that the two of you shan't speak to each other! I order that—"

Another day passed. And another. Alstair called twice more. Each time, by his voice, he was more desperate, more nerve-racked, closer to the bounds of madness. The second time he wept, the while he cursed Jack for being where there were none of the plant men.

"We're not interesting to the devils, now, except as animals. Our brains don't count! They're gutting the ship systematically. Yesterday they got the earthworms from the growing area where we grew crops! There's a guard on each of us now. Mine pulled out some of my hair this morning and ate it, rocking back and forth in ecstasy. We've no woolen shirts. They're animal!"

Another day still. Then Alstair was semi-hysterical. There were only three men left alive on the ship. He had instructions to give Jack in the landing of the egg-shaped vessel on

the uninhabited world. Jack was supposed to help. His destination was close now. The disk of the planet which was to be his and Helen's prison filled half the heavens. And the other planet toward which the *Adastra* was bound was a full-sized disk to Alstair.

Beyond the rings of Proxima Centauri there were six planets in all, and the prison planet was next outward from the home of the plant men. It was colder than was congenial to them, though for a thousand years their flesh-hunting expeditions had searched its surface until not a mammal or a bird, no fish or even a crustacean was left upon it. Beyond it again an ice-covered world lay, and still beyond there were frozen shapes whirling in emptiness.

"You know, now, how to take over when the beam releases the atmospheric controls," said Alstair's voice. It wavered as if he spoke through teeth which chattered from pure nerve strain. "You'll have quiet. Trees and flowers and something like grass, if the pictures they've made mean anything. We're running into the greatest celebration in the history of all hell. Every space ship called home. There won't be a Centaurian on the planet who won't have a tiny shred of some sort of animal matter to consume. Enough to give him that beastly delight they feel when they get hold of something of animal origin.

"Damn them! Every member of the race! We're the greatest store of treasure ever dreamed of! They make no bones of talking before me, and I'm mad enough to understand a good bit of what they say to each other. Their most high panjandrum is planning bigger space ships than were ever grown before. He'll start out for Earth with three hundred space ships, and most of the crews asleep or hibernating. There'll be three million devils straight from hell on those ships, and they've those damned beams that will fuse an earthly ship at ten million miles."

Talking helped to keep Alstair sane, apparently. The next day Jack's and Helen's egg-shaped vessel dropped like a plummet from empty space into an atmosphere which screamed wildly past its smooth sides. Then Jack got the ship under control and it descended slowly and ever more slowly and at last came to a cushioned stop in a green glade hard by a forest of strange but wholly reassuring trees. It was close to sunset on this planet, and darkness fell before they could attempt exploration.

They did little exploring, however, either the next day or the day after. Alstair talked almost continuously.

"Another ship coming from Earth," he said, and his voice cracked. "Another ship! She started at least four years ago. She'll get here in four years more. You two may see her, but I'll be dead or mad by tomorrow night! And here's the humorous thing! It seems to me that madness is nearest when I think of you, Helen, letting Jack kiss you! I loved you, you know, Helen, when I was a man, before I became a corpse watching my ship being piloted into hell. I loved you very much. I was jealous, and when you looked at Gary with shining eyes I hated him. I still hate him, Helen! Ah, how I hate him!" But Alstair's voice was the voice of a ghost, now, a ghost in purgatory.

Jack walked about with abstracted, burning eyes. Then he heard Helen at work, somewhere. She seemed to be struggling. It disturbed him. He went to see.

She had just dragged the last of the cages from the *Adastra* out into the open. She was releasing the little creatures within. Pigeons soared eagerly above her. Rabbits, hardly hopping out of her reach, munched delightedly upon the unfamiliar but satisfactory leafed vegetation underfoot.

Sheep browsed. There were six of them besides a tiny, wabbly-legged lamb. Chickens pecked and scratched. But there were no insects on this world. They would find only seeds and green stuff. Four puppies rolled ecstatically on scratchy green things in the sunlight.

"Anyhow," said Helen defiantly. "They can be happy for a while! They're not like us! We have to worry! And this world could be a paradise for humans!"

Jack looked somberly out across the green and beautiful world. No noxious animals. No harmful insects. There could be no diseases on this planet, unless men introduced them of set purpose. It would be a paradise.

The murmur of a human voice came from within the space ship. He went bitterly to listen. Helen came after him. They stood in the strangely shaped cubby-hole which was the control room. Walls, floors, ceiling, instrument cases—all were made of the lusterless dark-brown stuff which had grown into the shapes the Centaurians desired. Alstair's voice was strangely more calm, less hysterical, wholly steady.

"I hope you're not off exploring somewhere, Helen and Gary," it said from the speaker. "They've had a celebration here today. The *Adastra*'s landed. I landed it. I'm the only

man left alive. We came down in the center of a city of these devils, in the middle of buildings fit to form the headquarters of hell. The high panjandrum has a sort of palace right next to the open space where I am now.

"And today they celebrated. It's strange how much animal matter there was on the *Adastra*. They even found horsehair stiffening in the coats of our uniforms. Woolen blankets. Shoes. Even some of the soaps had an animal origin, and they 'refined' it. They can recover any scrap of animal matter as cleverly as our chemists can recover gold and radium. Queer, eh?"

The speaker was silent a moment.

"I'm sane, now," the voice said steadily. "I think I was mad for a while. But what I saw today cleared my brain. I saw millions of these devils dipping their arms into great tanks, great troughs, in which solutions of all the animal tissues from the *Adastra* were dissolved. The high panjandrum kept plenty for himself! I saw the things they carried into his palace, through lines of guards. Some of those things had been my friends. I saw a city gone crazy with beastly joy, the devils swaying back and forth in ecstasy as they absorbed the loot from Earth. I heard the high panjandrum hoot a sort of imperial address from the throne. And I've learned to understand quite a lot of those hootings.

"He was telling them that Earth is packed with animals. Men. Beasts. Birds. Fish in the oceans. And he told them that the greatest space fleet in history will soon be grown, which will use the propulsion methods of men, our rockets, Gary, and the first fleet will carry uncountable swarms of them to occupy Earth. They'll send back treasure, too, so that every one of his subjects will have such ecstasy, frequently, as they had today. And the devils, swaying crazily back and forth, gave out that squealing noise of theirs. Millions of them at once."

Jack groaned softly. Helen covered her eyes as if to shut out the sight her imagination pictured.

"Now, here's the situation from your standpoint," said Alstair steadily, millions of miles away and the only human being upon a planet of blood-lusting plant men. "They're coming here now, their scientists, to have me show them the inside workings of the rockets. Some others will come over to question you two tomorrow. But I'm going to show these devils our rockets. I'm sure—perfectly sure—that every space ship of the race is back on this planet.

"They came to share the celebration when every one of them got as a free gift from the grand panjandrum as much animal tissue as he could hope to acquire in a lifetime of toil. Flesh is a good bit more precious than gold, here. It rates, on a comparative scale, somewhere between platinum and radium. So they all came home. Every one of them! And there's a space ship on the way here from Earth. It'll arrive in four years more. Remember that!"

An impatient, distant hooting came from the speaker.

"They're here," said Alstair steadily. "I'm going to show them the rockets. Maybe you'll see the fun. It depends on the time of day where you are. But remember, there's a sister ship to the *Adastra* on the way."

Small hooting sounds, growing fainter, came from the speaker. Far, far away, amid the city of fiends, Alstair was going with the plant men to show them the rockets' inner workings. They wished to understand every aspect of the big ship's propulsion, so that they could build—or grow—ships as large to carry multitudes of their swarming myriads to a solar system where animals were to be found.

"Let's go outside," said Jack at last. "He said he'd do it, since he couldn't get a bit of a machine made that could be depended on to do it. But I believed he'd go mad. It didn't seem possible to live to their planet. We'll go outside and look at the sky."

Helen stumbled. They stood upon the green grass, looking up at the firmament above them. They waited, staring. And Jack's mind pictured the great rocket chambers of the *Adastra*. He seemed to see the strange procession enter it; a horde of the ghastly plant men and then Alstair, his face like marble and his hands as steady.

He'd open up the breech of one of the rockets. He'd explain the disintegration field, which collapses the electrons of hydrogen so that it rises in atomic weight to helium, and the helium to lithium, while the oxygen of the water is split literally into neutronium and pure force. Alstair would answer hooted questions. The supersonic generators he would explain as controls of force and direction. He would not speak of the fact that only the material of the rocket tubes, when filled with exactly the frequency those generators produced, could withstand the effect of the disintegration field.

He would not explain that a tube started without those generators in action would catch from the fuel and disintegrate, and that any other substance save one, under any

other condition save that one rate of vibration, would catch also and the tubes, ship, and planet alike would vanish in a lambent purple flame.

No; Alstair would not explain that. He would show the Centaurians how to start the Caldwell field.

The man and the girl looked at the sky. And suddenly there was a fierce purple light. It dwarfed the reddish tinge of the ringed sun overhead. For one second, for two, for three, the purple light persisted. There was no sound. There was a momentary blast of intolerable heat. Then all was as before.

The ringed sun shone brightly. Clouds like those of Earth floated serenely in a sky but a little less blue than that of home. The small animals from the *Adastra* munched contentedly at the leafy stuff underfoot. The pigeons soared joyously, exercising their wings in full freedom.

"He did it," said Jack. "And every space ship was home. There aren't any more plant men. There's nothing left of their planet, their civilization, or their plans to harm our Earth."

Even out in space, there was nothing where the planet of the Centaurians had been. Not even steam or cooling gases. It was gone as if it had never existed. And the man and woman of Earth stood upon a planet which could be a paradise for human beings, and another ship was coming presently, with more of their kind.

"He did it!" repeated Jack quietly. "Rest his soul! And we—we can think of living, now, instead of death."

The grimness of his face relaxed slowly. He looked down at Helen. Gently, he put his arm about her shoulders.

One of the freed pigeons found a straw upon the ground. He tugged at it. His mate inspected it solemnly. They made pigeon noises to each other. They flew away with the straw. After due discussion, they had decided that it was an eminently suitable straw with which to begin the building of a nest.

Nobody Saw the Ship

The landing of the Qul-En ship went completely unnoticed, as its operator intended. It was armed, of course. Despite its tiny size—no more than fifteen feet in diameter—and the fact that its crew was a single individual, it could have depopulated human cities in seconds. But its purpose was not destruction. It was seeking a complex hormone substance which Qul-En medical science said theoretically must exist, but the molecule of which even the Qul-En could not synthesize direct. Yet it needed to be found, in great quantity. Once discovered, the problem of obtaining it would be taken up, with the whole resources of the whole race behind the project. But first it had to be found. The tiny ship assigned to explore the solar system for the hormone wished to pass unnoticed. Its mission of discovery should be accomplished in secret if possible. For one thing, the desired hormone would be destroyed by contact with the typical Qul-En ray-gun beam, so that normal methods of securing zoological specimens could not be used.

The ship winked into being in empty space, not far from Neptune. It drove for that chilly planet and hovered about it, and decided not to land. It sped inward toward the sun and touched briefly on Io, but found no life there. It dropped into the atmosphere of Mars and did not rise again for a full week, but the vegetation on Mars is thin and the animals were degenerate survivors of once specialized forms. The ship came to Earth and hovered lightly at the atmosphere's very edge for a long time, and doubtless chose its point of descent for reasons that seemed good to its occupant. Then it landed.

It actually touched earth at night. There was no rocket-drive to call attention. By dawn it was well-concealed. Only

one living creature had seen it land, a mountain lion. Even so, by midday the skeleton of the lion was picked clean by buzzards, with ants tidying up after them. And the Qul-En in the ship was enormously pleased. The carcass, before being abandoned to the buzzards, had been studied with an incredible competence. The lion's nervous system—particularly the mass of tissue in the skull—unquestionably contained either the desired hormone itself or something so close to it that it could be modified and the hormone produced. It remained only to discover how large a supply of the precious material could be found on Earth. It was not feasible to destroy a group of animals—say of the local civilized race—and examine their bodies, because the hormone would be broken down by the weapon which would search for it. So an estimate of available sources would have to be made by sampling. The Qul-En in the ship prepared to take samples.

The ship had landed in tumbled country some forty miles south of Ensenada Springs. It was national forest territory, on which grazing rights were allotted to sheep-ranchers after illimitable red tape. Within ten miles of the hidden ship there were rabbits, birds, deer, coyotes, a lobo wolf or two, assorted chipmunks, field mice, perhaps as many as three or four mountain lions, one flock of two thousand sheep, one man and one dog. The man was Antonio Menendes. He was ancient, unwashed and ignorant, and the official shepherd of the sheep. The dog was Salazar, of dubious ancestry but sound worth, who actually took care of the sheep —and knew it. He was scarred from battles done in their defense. He was unweariedly solicitous of the woolly half-wits in his charge. There were whole hours, because of his duties, when he could not find time to scratch himself. He was reasonably fond of Antonio, but he knew that the man did not really understand sheep.

Besides these creatures, among whom the Qul-En expected to find its samples, there were insects. These, however, the tiny alien being disregarded. It would not be practical to get any great quantity of the substance it sought from such small organisms.

By nightfall of the day after its landing the door of the ship opened, and the explorer came out in a vehicle designed expressly for sampling on this planet. The vehicle came out, stood on its hind legs, closed the door and piled brush back to hide it. Then it moved away with the easy, feline

gait of a mountain lion. At a distance of two feet it *was* a mountain lion. It was a magnificient job of adapting Qul-En engineering to the production of a device which would carry a small-bodied explorer about a strange world without causing remark. The explorer nested in a small cabin occupying the space—in the facsimile lion—that had been occupied by the real lion's lungs. The fur of the duplicate was convincing. Its eyes were excellent, housing scanning-cells which could make use of anything from ultraviolet far down into the infrared. Its claws were retractile and of plastic much stronger and keener than the original lion's claws. It had other equipment, including a weapon against which nothing on this planet could stand, and for zoological sampling it had one remarkable advantage. It had no animal smell. It was all metal and plastics.

On the first night of its roaming, nothing in particular happened. The explorer became completely familiar with the way the controls of the machine worked. As a machine, of course, it was vastly more powerful than an animal. It could make leaps no mere creature of flesh and blood could duplicate. Its balancing devices were admirable. It was, naturally, immune to fatigue. The Qul-En inside it was pleased with the job.

That night Antonio and Salazar bedded down their sheep in a natural amphitheater, and Antonio slept heavily, snoring. He was a highly superstitious ancient, so he wore various charms of a quasi-religious nature. Salazar merely turned around three times and went to sleep. But while the man slept soundly, Salazar woke often. Once he waked sharply at a startled squawking among the lambs. He got up and trotted over to make sure that everything was all right. He sniffed the air suspiciously. Then he went back, scratched where a flea had bitten him, bit—nibbling—at a place his paws could not reach and went back to sleep. At midnight he made a clear circle around his flock and went back to slumber with satisfaction. Toward dawn he raised his head suspiciously at the sound of a coyote's howl. But the howl was far away. Salazar dosed until daybreak when he rose, shook himself, stretched himself elaborately and scratched thoroughly, and was ready for a new day. The man waked, wheezing, and cooked breakfast. It appeared that the normal order of things would go undisturbed.

For a time it did. There was certainly no disturbance at the ship. The small silvery vessel was safely hidden. There

was a tiny, flickering light inside—the size of a pinpoint—which wavered and changed color constantly where a sort of tape unrolled before it. It was a recording device, making note of everything the roaming pseudo mountain lion's eyes saw and everything its microphonic ears listened to. There was a bank of air-purifying chemical which proceeded to regenerate itself by means of air entering through a small ventilating slot. It got rid of carbon dioxide and stored up oxygen in its place, in readiness for further voyaging.

Of course, ants explored the whole outside of the space-vessel, and some went inside through the ventilator-opening. They began to cart off some interesting if novel foodstuff they found within. Some very tiny beetles came exploring, and one variety found the air-purifying chemical refreshing. Numbers of that sort of beetle moved in and began to raise large families. A minuscule moth, too, dropped eggs lavishly in the nestlike space in which the Qul-En explorer normally reposed during space-flight. But nothing really happened.

Not until late morning. It was two hours after breakfast time when Salazar found traces of the mountain lion which was not a mountain lion. He found a rabbit that had been killed. Having been killed, it had very carefully been opened up and its various internal organs spread out for examination and its nervous system traced in detail. Its brain tissue, particularly, had been most painstakingly dissected, so the amount of a certain complex hormone to be found in it could be calculated with precision. The Qul-En in the lion shape had been vastly pleased to find the sought-for hormone in another animal beside a mountain lion. The dissection job was a perfect anatomical demonstration. No instructor in anatomy could have done better, and few neurosurgeons could have done as well with the brain. It was, in fact, a perfect laboratory job done on a flat rock in the middle of a sheep range, and duly reproduced on tape by a flickering, color-changing light. The reproduction, however, was not as good as it should have been, because the tape was then covered by small ants who had found its coating palatable and were trying to clean it off.

Salazar saw the rabbit. There were blowflies buzzing about it. There was a buzzard reluctantly flying away because of his approach. Salazar barked at the buzzard. Antonio heard the barking. He came.

Antonio was ancient, superstitious and unwashed. He

came wheezing, accompanied by flies who had not finished breakfasting on the bits of his morning meal he had dropped on his vest. Salazar wagged his tail and barked at the buzzard. The rabbit had been neatly dissected, but not eaten. The cuts which opened it up were those of a knife or scalpel. It was not—it was definitely not—the work of an animal. But there were mountain-lion tracks and nothing else. More, every one of the tracks was that of a hind foot! A true mountain lion eats what he catches. He does not stand on his hind paws and dissect it with scientific precision. Nothing earthly had done this!

Antonio's eyes bugged out. He thought instantly of magic. Black magic. He could not imagine dissection in the spirit of scientific inquiry. To him, anything that killed and then acted in this fashion could only come from the devil.

He gasped and fled, squawking. When he had run a good hundred yards Salazar caught up to him, very much astonished. He overtook his master and went on ahead to see what had scared the man so. He made casts to right and left, and then went in a conscientious circle all around the flock under his care. Presently he came back to Antonio, his tongue lolling out, to assure him that everything was all right. But Antonio was packing, with shaking hands and a sweat-streaked brow.

In no case is the neighborhood of a mountain lion desirable for a man with a flock of sheep. But this was no ordinary mountain lion. Why, Salazar—honest, stouthearted Salazar—did not scent a mountain lion in those tracks. He would have mentioned it vociferously if he had. So this was beyond nature. The lion was *un fantasmo*—or worse. Antonio's thoughts ran to were-tigers, ghost-lions, and sheer Indian devils. He packed, while Salazar scratched fleas and wondered what was the matter.

They got the flock on the move. The sheep made idiotic efforts to disperse and feed placidly where they were. Salazar rounded them up and drove them on. It was hard work. But even Antonio helped in frantic energy—which was unusual.

Near noon, four miles from their former grazing ground, there were mountain peaks all around them. Some were snow-capped, and there were vistas of illimitable distance everywhere. It was very beautiful indeed, but Antonio did not notice. Salazar came upon buzzards again. He chased them with loud barkings from the meal they reluctantly shared with blowflies and ants.

This time it wasn't a rabbit. It was a coyote. It had been killed and most painstakingly taken apart to provide at a glance all significant information about the genus *canis*, species *latrans*, in the person of an adult male coyote. It was a most enlightening exhibit. It proved conclusively that there was a third type of animal, structurally different from both mountain lions and rabbits, which had the same general type of nervous system, with a mass of nerve tissue in one large mass in a skull, which nerve tissue contained the same high percentage of the desired hormone as the previous specimens. Had it been recorded by a tiny colored flame in the hidden ship—the flame was now being much admired by small red bugs and tiny spiders—it would have been proof that the Qul-En would find ample supplies on Earth of the complex hormone on which the welfare of their race now depended. Some members of the Qul-En race, indeed, would have looked no farther. But sampling which involved only three separate species and gave no proof of their frequency was not quite enough. The being in the synthetic mountain lion was off in search of further evidence.

Antonio was hardly equipped to guess at anything of this sort. Salazar led him to the coyote carcass. It had been neatly halved down the breastbone. One half the carcass had been left intact. The other half was completely anatomized, and the brain had been beautifully dissected and spread out for measurement. Antonio realized that intelligence had been at work. But—again—he saw only the pad-tracks of a mountain lion. And he was literally paralyzed by horror. He was superstitious to the core. He cherished not only the relatively mild superstitions of the Spanish but the other blood-curdling terrors of his pagan Indian ancestors. And a man who really believes in Aztec demons will consider a mere werewolf as practically a household pet by comparison!

Antonio was scared enough to be galvanized into unbelievable energy. He would have fled gibbering to Ensenada Springs, some forty miles as the crow flies, but to flee would be doom itself. The devils who did this sort of work liked—he knew—to spring upon a man alone. But they can be fooled.

The Qul-En in the artificial mountain lion was elated. To the last quivering appendage on the least small tentacle of its body the pilot of the facsimile animal was satisfied. It had found good evidence that the desired nervous system and concentration of the desired hormone in a single mass of

nerve tissue was normal on this planet! The vast majority of animals should have it. Even the local civilized race might have skulls with brains in them, and from the cities observed from the stratosphere that race might be the most numerous fair-sized animal on the planet!

It was to be hoped for, because the taking of hormone specimens from cities would be most convenient. Long-continued existence under the artificial conditions of civilization—a hundred thousand years of it, no less—had brought about exhaustion of the Qul-En's ability to create all their needed hormones in their own bodies. Tragedy awaited the race unless the most critically needed substance was found. But now it had been! So the tiny explorer in the seeming mountain lion was very joyful and impatient to finish the gathering of evidence and take the good news home.

Antonio saw it an hour later and wanted to shriek. It looked exactly like a mountain lion, but he knew it was not flesh and blood because it moved in impossible bounds. No natural creature could leap sixty feet. The mountain-lion shape did. But it was convincingly like its prototype to the eye. It stopped and regarded the flock of sheep, made soaring progression to the front of the flock and came back again. Salazar ignored it. Neither he nor the sheep scented carnivorous animal life. Antonio hysterically concluded that it was invisible to them. He began an elaborate, lunatic pattern of behavior to convince the lion that magic was at work against it, too.

He began to babble to his sheep with infinite politeness. He spoke to blank-eyed creatures as Señor Gomez and Señora Oñate. He chatted feverishly with a wicked-eyed ram, whom he called Señor Guttierez. A clumsy, wobbling lamb almost upset him, and he scolded the infant sheep as Pepito. He lifted his hat with great gallantry to a swollen ewe, hailing her as Señora Garcia, and observed in a quavering voice that the flies were very bad today. He moved about in his flock, turning the direction of its march and acting as if surrounded by a crowd of human beings. This should at least confuse the devil whom he saw. And while he chatted with seeming joviality the sweat poured down his face in streams.

Salazar took no part in this deception. The sheep were fairly docile, once started, and he was able to pause occasionally to scratch, and once even to do a luxurious, thorough job on that place in his back between his hind legs

which is so difficult to reach. There was only one time when he had any difficulty. That was when there was a sort of eddying of the sheep ahead. There were signs of panic. Salazar went trotting to the spot. He found sheep milling stupidly and rams pawing the ground defying they had no idea what, and Salazar found a deer carcass on the ground and the smell of fresh blood in the air and the sheep upset because of it. He drove them on past, barking where barking would serve and nipping flanks where necessary, and afterward disgustedly tonguing bits of wool out of his mouth.

The sheep went on. But Antonio, when he came to the deer carcass, went icy-cold in the most exquisite terror. The deer had been killed by a mountain lion—there were tracks about. Then it had been cut into as if by a dissector's scalpel, but the job was incomplete. Actually, the pseudo mountain lion had been interrupted by the approach of the flock. There were hardly blowflies on the spot as yet. Antonio came to it as he chatted insanely with a sheep, with sore eyes and a halo of midges about its head, whom he addressed as Señorita Carmen. But when he saw the deer his throat clicked shut. He was speechless.

But he was also half crazed by fear. To pass a creature laid out for magical ceremony was doom indubitable, but Antonio craved so terribly to escape this haunted place that he acted from pure desperation. He recited charms which were stark paganism and would involve a heavy penance when next he went to confession. He performed other actions, equally deplorable. When he went on the deer was quite spoiled for neat demonstration of the skeletal, circulatory, muscular and especially the nervous system and brain structure of genus *cervus* species *dama*, specimen an adult doe. Antonio had piled over the deer all the brush within reach, had poured over it the kerosene he had for his night-lantern, and had set fire to the heap with incantations that made it a wholly impious sacrifice to quite nonexistent heathen demons. But he was frantic with fear.

Salazar, trotting back to the front of the flock after checking on Antonio and the rear guard, wrinkled his nose and sneezed as he went past the blaze again. And Antonio tottered on after him.

But Antonio's impiety had done no good. The tawny shape bounded back into sight among the boulders on the hillside. It leaped with infinite grace for impossible distances. Naturally! No animal can be as powerful as a ma-

chine, and the counterfeit mountain lion was a machine vastly better than men could make. It was a traveling and exploring—and dissecting—mechanism for the use of a very small being of the Qul-En, who was now zestfully regarding the flock of sheep. It looked upon Salazar and Antonio with no less interest. The biped, observed the Qul-En, had initiated a primitive chemical process at the carcass of the last specimen. Why? And the small, four-legged creature which ran about the flock? The Qul-En explorer was an anatomist and organic chemist rather than a zoologist proper, but it guessed that the dog was probably a scavenger and the man had some other symbiotic relationship to the flock.

Salazar, the dog, was done a grave injustice in that estimate. Even Antonio was given less than he deserved. In his panic he had turned a specimen prepared for magic into an utterly pagan sacrifice—a burnt offering to placate a purely mythical devil out of Aztec folklore. Now he was gray with terror. The blood in his veins turned to ice as he saw the false mountain lion bounding back upon the hillside. No normal wild creature would display itself so openly. Antonio considered himself both doomed and damned. Presently the thing would come and carry him off, shrieking, to horrors unspeakable. Stark despair filled him. But with shaking hands and no hope at all he carved a deep cross on the point of a bullet for his ancient rifle. Licking his lips, he made similar incisions on other bullets in reserve.

The Qul-En vehicle halted. The flock had been counted. Now to select specimens and get to work. There were six new animal types to be dissected for the nervous organism yielding the looked-for hormone. Two kinds of sheep—male and female, and adult and immature of each kind—the biped and the dog. Then a swift survey to survey the probable total number of such animals available, and . . .

Antonio saw that the devil mountain lion was still. He got down on one knee, fervently crossed himself and fed a cross-marked bullet into the chamber of his rifle. He lined up the sights on the unearthly creature. The lion facsimile watched him interestedly. The sight of a rifle meant nothing to the Qul-En, naturally. But Antonio's kneeling posture was strange. It was part, perhaps, of the pattern of conduct which had led him to start that oxidation process about the deer specimen. The Qul-En, of course, were far too civilized to make use of so crude a technical aid as fire, but the pilot of the mountain lion had seen a flame once, in a scientific

demonstration of oxidation. He had recognized the same reaction in the crackling blaze above the deer.

Antonio fired. His hands trembled, and the rifle shook. Nothing happened. He fired again and again, gasping in his fear. And he missed every time.

The cross-marked bullets crashed into red earth and splashed from naked rock all about the Qul-En vehicle. When sparks spat from a flint pebble the pilot of the mountain lion realized that there was actual danger here. It could have slaughtered man and dog and sheep by the quiver of a tentacle, but that would have ruined them as specimens. And its discoveries had been so splendidly heartening that it did not wish to delay its return to its home planet to hunt for more. To avoid spoiling specimens it intended to take later the Qul-En put the mountain-lion shape into a single, magnificent leap. It soared more than a hundred feet uphill and over the crest at the top. Then it was gone.

Salazar ran barking after the thing at which Antonio had fired. He sniffed at the place from which it had taken off. There was no animal smell there at all. He sneezed and then trotted down again. Antonio lay flat on the ground, his eyes hidden, babbling. He had seen irrefutable proof that the mountain lion was actually a fiend from hell.

Salazar approached him, cautiously. He sniffed. Antonio screamed. Salazar licked his hand placatingly. Then Antonio lifted his head and stared affrightedly about him, then struggled feebly to his feet. Salazar stood beside him, wagging his tail. Antonio sobbed. His flock was going on ahead. He tottered after it. He panted pure terror at every breath, and he passionately repented all his sins. Antonio's nerves were in bad shape.

Behind the hill-crest the Qul-En moved away. It had not given up its plan of selecting specimens from the flock, of course, nor of anatomizing the man and dog. It was genuinely interested in the biped's novel method of defense. It dictated its own version of the problems raised on a tight beam to the wavering, color-changing flame. Why did not the biped prey on the sheep if it could kill them? What was the symbiotic relationship of the dog to the man and the sheep? The three varieties of animal associated freely. The Qul-En dictated absorbed speculations. Then it hunted for other specimens. It found a lobo wolf and killed it, and verified that this creature also could be a source of hormones. It slaughtered a chipmunk and made a cursory

examination. Its ray-beam had pretty well destroyed the creature's brain tissue, but by analogy of structure it should be a source also.

In conclusion, the Qul-En made a note via the wavering pinpoint of flame that the existence of a hormone-bearing nervous system, centralized in a single mass of hormone-bearing nerve tissue inside a bony structure, seemed universal among the animals of this planet. Therefore it would merely examine the four other types of large animal it had discovered and take off to present its findings to the Center of its race. With a modification of the ray-beam to kill specimens without destroying the desired hormone the Qul-En could unquestionably secure as much of the hormone as the race could possibly need. Concentrations of the local civilized race in cities should make large-scale collection of the hormone practical unless that civilized race was an exception to the general nervous structure of all animals so far observed.

This was dictated to the pinpoint flame, and the flame faithfully wavered and changed color to make the record. But the tape did not record it. A rather large beetle had jammed the tape-reel. It was squashed in the process, but it effectively messed up the recording apparatus. Even before the tape stopped moving, though, the record had become defective. Tiny spiders had spun webs. Earwigs got themselves caught. The flame, actually, throbbed and pulsed restlessly in a cobwebby coating of gossamer and tiny insects. Silverfish were established in the plastic lining of the Qul-En ship. Beetles multiplied enormously in the air-refresher chemical. Moth larvae already gorged themselves on the nest-material of the intrepid explorer outside. Ants were busy on the food stores. Mites crawled into the ship to prey on their larger fellows, and a praying mantis or so had entered to eat their smaller ones. There was an infinite number of infinitesimal flying things dancing in the dark, and larger spiders busily spun webs to snare them. Flies of various sorts were attracted by odors coming out of the ventilator-opening, centipedes rippled sinuously inside, and . . .

Night fell upon the world. The pseudo mountain lion roamed the wild, keeping in touch with the tide of baa-ing sheep now headed for the lowlands. It captured a field mouse and verified the amazing variety of planetary forms containing brain tissue rich in hormones. But the sheep could not be driven at night. To move them farther when stars

came out became impossible. The Qul-En returned to select its specimens in the dark, with due care not to allow the man to use his strange means of defense. It found the flock bedded down.

Salazar and Antonio rested. They had driven the sheep as far as it was possible to drive them that day. Though he was sick with fear and weak with terror Antonio had struggled on until Salazar could do no more. But Antonio did not leave the flock. The sheep were in some fashion a defense—if only a diversion—against the creature which so plainly was not flesh and blood.

He made a fire, too, because he could not think of staying in the dark. Moths came and fluttered about the flames, but he did not notice. He tried to summon courage. After all, the unearthly thing had fled from bullets marked with a cross, even though they missed. With light to shoot by he might make a bull's-eye. So Antonio sat shivering by his fire, cutting deeper crosses into the points of his bullets, his throat dry and his heart pounding as he listened to the small noises of the sheep and the faint, thin sounds of the wilderness.

Salazar dozed by the fire. He had had a very hard day, but even so he slept lightly. When something howled, very far away, his head went up instantly and he listened. But it was nowhere near. He scratched himself and relaxed. Once something hissed, and he opened his eyes.

Then he heard a curious, strangled "Baa-a-a." Instantly he was racing for the spot. Antonio stood up, his rifle clutched fast. Salazar vanished. Then the man heard an outburst of infuriated barking. Salazar was fighting something, and he was not afraid of it. He was enraged. Antonio moved toward the spot, his rifle ready.

The barking was moving toward the slopes beyond the flock. It grew more enraged and more indignant still. Then it stopped. There was silence. Antonio called, trembling. Salazar came padding up to him, whining and snarling angrily. He could not tell Antonio that he had come upon something in the shape of a mountain lion, but which was not—it didn't smell right—carrying a mangled sheep away from its fellows. He couldn't explain that he'd given chase, but the shape made such monstrous leaps that he was left behind and pursuit was hopeless. Salazar made unhappy, disgusted, disgraced noises to himself. He bristled. He whined bitterly. He kept his ears pricked up and he tried twice to dart off on

a cast around the whole flock, but Antonio called him back. Antonio felt safer with the dog beside him.

Off in the night, the Qul-En operating the mountain-lion shape caused the vehicle to put down the sheep and start back toward the flock. It would want at least four specimens besides the biped and the dog. But the dog was already on the alert. The Qul-En had not been able to kill the dog, because the mouth of the vehicle was closed on the sheep. It would probably be wisest to secure the dog and biped first—the biped with due caution—and then complete the choice of sheep for dissection.

The mountain-lion shape came noiselessly back toward the flock. The being inside it felt a little thrill of pleasure. Scientific exploration was satisfying, but rarely exciting. One naturally protected oneself adequately when gathering specimens. But it was exciting to have come upon a type of animal which would dare to offer battle. The Qul-En in the mountain-lion shape reflected that this was a new source of pleasure—to do battle with the fauna of strange planets in the forms native to these planets.

The padding vehicle went quietly in among the woolly sheep. It saw the tiny blossom of flame that was Antonio's campfire. Another high-temperature oxidation process. . . . It would be interesting to see if the biped was burning another carcass, this time of its own killing. . . .

The shape was two hundred yards from the fire when Salazar scented it. It was upwind from the dog. Its own smell was purely that of metals and plastics, but its fur now was bedabbled with the blood of the sheep that had been its first specimen of the night. Salazar growled. His hackles rose. His every instinct was for the defense of his flock. He had smelled that blood when the thing which wasn't a mountain lion left him behind with impossible leapings.

He went stiff-legged toward the shape. Antonio followed in a sort of despairing calm born of utter hopelessness.

A sheep uttered a strangled noise. The Qul-En had come upon a second specimen. It left the dead sheep behind for the moment while it went to look at the fire. It peered into the flames, trying to see if Antonio—the biped—had another carcass in the flames as seemed to be his habit. It looked—

Salazar leaped for its blood-smeared throat in utter silence and absolute ferocity. He would not have dreamed of attacking a real mountain lion with such utter lack of caution. But this was not a mountain lion. His weight and the sud-

denness of his attack caught the operator by surprise. The shape toppled over. And then there was a crazy uproar that was scared bleatings from sheep nearby and bloodthirsty snarlings from Salazar. He had the salty taste of sheep-blood in his mouth and a yielding plastic throat between his teeth.

The synthetic lion struggled absurdly. Its weapon, of course, was a ray gun which was at once aimed and fired when its jaws opened wide. The being inside tried to clear and use that weapon. It would not bear upon Salazar. And the operator of the mountain lion was certain to win the fight, of course, in any case. Only it would have to think to make the device lie down, double up its mechanical body and claw Salazar loose from its mechanical throat with the mechanical claws on its mechanical hind legs. At first the Qul-En inside concentrated on getting its steed back on its feet.

That took time, because whenever Salazar's legs touched ground, he used the purchase to shake the throat savagely. In fact, Antonio was within twenty yards when the being from the ship got its vehicle upright. It held the mechanical head high, then, to keep Salazar dangling while it considered how to dislodge him.

And it saw Antonio. For an instant, perhaps, the Qul-En was alarmed. But Antonio did not kneel. He made no motion which the pilot—seeing through infrared-sensitive photo-cells in the lion's eyeballs—could interpret as offensive. So the machine moved boldly toward him. The dog dangling from its throat could be disregarded for the moment. The killing-ray was absolutely effective, but it did spread, and it did destroy the finer anatomical features of tissues it hit. Especially, it destroyed nerve tissue outright.

The being inside the mountain lion was pleasantly excited and very much elated. The biped stood stock-still, frozen by the spectacle of a mountain lion moving toward it with a snarling dog hanging disregarded at its throat. The biped would be a most interesting subject for dissection, and its means of offense would be most fascinating to analyze. . . .

Antonio's fingers contracted spasmodically as the shape from the ship moved toward it. Quite without intention they pulled the trigger of the rifle. The deeply cross-cut bullet scarred Salazar's flank, removing a quarter-inch patch of skin. It went on into the plastic and metal shape and hit a foreleg. What metal the vehicle contained was mostly magne-

sium, for lightness. But there were steel wires imbedded for magnetic purposes. The bullet smashed through plastic and magnesium. It struck a spark upon the steel.

There was a flaring, sun-bright flash of flame. There was a dense cloud of smoke. The mountain-lion shape leaped furiously. The jerk dislodged a slightly singed Salazar and sent him rolling. The mountain-lion vehicle landed and rolled over and over, one leg useless and spouting monstrous, white, actinic fire. The being inside knew an instant's panic. Then it felt yielding sheep bodies below it and thrashed about violently and crazily, and at last the Qul-En jammed the flame-spurting limb deep into soft earth. The fire went out. But that leg of its vehicle was almost useless.

For an instant deadly rage filled the tiny occupant of the cabin where a mountain lion's lungs should have been. It almost turned and opened the mouth of its steed and poured out the killing-beam. Almost. The flock would have died instantly, and the man and the dog, and all things in the wild for miles. But that would not have been scientific. After all, this mission should be secret. And the biped . . .

The Qul-En ceased the thrashings of its vehicle. It thought coldly. Salazar raced up to it, barking with a shrillness that told of terror valorously combatted. He danced about, barking.

The Qul-En found a solution. Its vehicle rose on its hind legs and raced up the hillside. It was an emergency method of locomotion for which this particular vehicle was not designed, and it required almost inspired handling of the controls to achieve it. But the Qul-En inside was wholly competent. It guided the vehicle safely over the hilltop while Salazar made only feigned dashes after it. Safely away, the Qul-En stopped and deliberately experimented until he developed the process of running on three legs. Then the mountain lion which was not a mountain lion went bounding through the night toward its hidden ship.

Within an hour it clawed away the brush from the exit-port, crawled inside and closed the port after it. As a matter of pure precaution, it touched the "take-off" control before it even came out of its vehicle.

The ventilation-opening closed—very nearly. The ship rose quietly and swiftly toward the skies. Its arrival had not been noted. Its departure was quite unsuspected.

It wasn't until the Qul-En touched the switch for the ship's system of internal illumination to go on that anything

appeared to be wrong. There was a momentary arc—and darkness. There was no interior illumination. Ants had stripped insulation from essential wires. The lights were shorted. The Qul-En was bewildered. It climbed back into the mountain-lion shape to use the infrared-sensitive scanning cells.

The interior of the ship was a crawling mass of insect life. There were ants and earwigs and silverfish and mites and spiders and centipedes and mantises and beetles. There were moths and larvae and grubs and midges and gnats and flies. The recording instrument was shrouded in cobwebs and hooded in dust that was fragments of the bodies of the spiders' tiny victims. The air-refresher chemicals were riddled with the tunnels of beetles. Crickets, even, devoured plastic parts of the ship and chirped loudly. And the controls —ah! the controls—insulation stripped off here. Brackets riddled or weakened or turned to powder there. The ship could rise, and it did. But there were no controls at all.

The Qul-En went into a rage deadly enough to destroy the insects or itself. The whole future of its race depended on the discovery of an adequate source of a certain hormone. That source had been found. Only the return of this one small ship—fifteen feet in diameter—was needed to secure the future of a hundred-thousand-year-old civilization. And it was impeded by the insect life of the planet left behind! Insect life so low in nervous organization that the Qul-En had ignored it!

The ship was twenty thousand miles out from earth when the occupant of the mountain lion used its ray-beam gun to destroy all the miniature enemies of its race. The killing-beam swept about the ship. Mites, spiders, beetles, larvae, silverfish and flies—everything died. Then the Qul-En crawled out and began furiously to make repairs. The technical skill needed was not lacking. In hours, this same being had made a perfect counterfeit of a mountain lion to serve it as a vehicle. Tracing and replacing gnawed-away insulation would be merely a tedious task. The ship would return to its home planet. The future of the Qul-En race would be secure. Great ships, many times the size of this, would flash through emptiness and come to this planet with instruments especially designed for collecting specimens of the local fauna. The cities of the civilized race would be the simplest and most ample sources of the so-desperately-needed hormone, no doubt. The inhabitants of even one city would furnish a

stop-gap supply. In time—why, it would become systematic. The hormone would be gathered from this continent at this time, and from that continent at that, allowing the animals and the civilized race to breed for a few years in between collections. Yes . . .

The Qul-En worked feverishly. Presently it felt a vague discomfort. It worked on. The discomfort increased. It could discover no reason for it. It worked on, feverishly. . . .

Back on Earth, morning came. The sun rose slowly, and the dew lay heavy on the mountain grasses. Far away peaks were just beginning to be visible through the clouds that had lain on them overnight. Antonio still trembled, but Salazar slept. When the sun was fully risen he arose, shook himself and stretched elaborately, then scratched thoroughly and shook himself again and was ready for a new day. When Antonio tremblingly insisted that they drive the flock back toward the lowlands Salazar assisted. He trotted after the flock and kept them moving. That was his business.

Out in space the silvery ship suddenly winked out of existence. Enough of its circuits had been repaired to put it in overdrive. The Qul-En was desperate, by that time. It felt itself growing weaker, and it was utterly necessary to reach its own race and report the salvation it had found for them. The record of the flickering flame was ruined. The Qul-En felt that it itself was dying. But if it could get near enough to any of the planetary systems inhabited by its race it could signal them and all would be well.

Moving ever more feebly, the Qul-En managed to get lights on within the ship again. Then it found what it considered the cause of its increasing weakness and spasmodic, gasping breaths. In using the killing-ray it had swept all the interior of the ship. But not the mountain-lion shape. Naturally! The mountain-lion shape had killed specimens and carried them about. While its foreleg flamed, it had even rolled on startled, stupid sheep. It had acquired fleas—perhaps some from Salazar—and ticks. The fleas and ticks had not been killed. They happily inhabited the Qul-En.

The Qul-En tried desperately to remain alive until a message could be given to its people. But it was not possible. There was a slight matter the returning explorer was too much wrought up to perceive, and the instruments that would have reported it were out of action because of destroyed insulation. When the ventilation-slit was closed as the ship took off it was not closed completely. There was a large bee-

tle in the way. There was a continuous, tiny leakage of air past the crushed chitinous armor. The Qul-En in the ship died of oxygen-starvation without realizing what had happened, just as human pilots sometimes black out from the same cause before they know what is the matter. So the little silvery ship never came out of overdrive. It went on forever, not reporting its discovery.

The fleas and ticks, too, died in time. They died very happily, very full of Qul-En body-fluid. But they never had a chance to report to their fellows that the Qul-En were very superior eating.

The only one who could report was Antonio. And he told his story and was laughed at. Only his cronies, ignorant and superstitious men like himself, could believe in the existence of a thing not of earth, in the shape of a mountain lion that leaped hundreds of feet at a time, which dissected wild creatures and made magic over them, but fled from bullets marked with a cross and bled flame and smoke when such a bullet wounded it.

Such a thing, of course, was absurd.

THE TRANS-HUMAN

WHEN JOHNNY WAS FIVE YEARS OLD, he didn't know he was a human being. On his fifth birthday he was living in an eight-sided tower under a yellow sky, and he played and had his lessons in a most improbably-shaped walled enclosure, and he thought he was a very, very happy Khasr child. He didn't know that the Khasr had played a very dirty trick on him by not killing him when they massacred his parents and all the other colonists on Llandu II, and he didn't suspect that every act of kindness they showed him afterward was part of an even dirtier trick. His playmates were especially chosen Khasr, but he didn't know that, either. When he waked in the morning, his playmates waked too. Johnny slept on a soft cushion, but his playmates slept dangling from the bars of a cage-like contraption, hanging by the claws on each of their eight legs. When he'd had his bath they came crawling about him, saying "Good morning Johnny," in human voices that they'd carefully learned to copy from human vision-records. Johnny beamed at them and zestfully asked what they'd play that day.

They had eight legs, those Khasr, and barrel-shaped bodies, and compared to their expressions an Earthian tarantula looks positively benevolent, but Johnny didn't know. He didn't remember when he'd had human parents. He'd been barely two when he was captured and carried away; the small colony his parents had lived in had been melted down to a lake of slag. There'd been elaborate conditioning work on Johnny, to make him able to stand the sight of Khasr. At first they used euphoric drugs to keep him from screaming with horror when they appeared. Then he associated euphoria with the sight of them. At three he believed implicitly that he was a Khasr. At five he thought he was a happy Khasr child.

On his fifth birthday they first showed him pictures of men. His tutors explained carefully that here were some new animals that he should learn about. Since he was going to grow up to be the bravest of all Khasr, he needed to learn about the creatures he would hunt and kill. So—and here his crawling Khasr playmates made a human-sounding chorus of agreement—so today Johnny would play at the killing of men.

And he did. He played according to Khasr traditions of the heroic. The Khasr were warlike and not nice people. When they dicovered humans, and found that men were spreading all through the First Sector of the galaxy, they made war as a matter of course. But the Khasr tradition of a well-conducted war was one that their enemies didn't know anything about. Their idea of a glorious victory was a sneak-attack in which not a single one of the persons attacked had an instant's uneasiness before he was dead.

So when Johnny and his playmates played at killing humans, it wasn't hunting as human children would have played. It was strictly murder. But the slithering, clicking Khasr squealed gleefully (as they had learned to from vision-records of human children)—when Johnny turned a make-believe coagulator-beam on the foolish make-believe humans who had come out of a make-believe spaceship, and make-believe-killed every one before they knew there was a Khasr around.

It was a charming new game, this pastime that Johnny was taught on what happened to be his fifth birthday. Before the double suns set that afternoon, Johnny had slaughtered imaginary thousands of those monsters, men. He went to bed in happy exhaustion, beaming at the universe.

This was within a week or so of the Khasr massacre on the Mithran Worlds. At that time human colonies were still not using detectors. The official opinion was that the vanishing of spaceships without trace was due to pirates, and the small human colonies occasionally found burned down to slag were the victims of pirates too. There was an intensive hunt on for the people who supplied those imaginary pirates.

But the Mithran Worlds killings shattered that illusion. There were fifty thousand people on the inmost planet, nearly that many on the second, and a quarter-million on the third. When every human being on all three planets was murdered *and* incinerated with no clue to the murderers,

the size of the atrocity proved it wasn't pirates. Human official minds change slowly, but it had to be admitted that somewhere there must be a race something like the Khasr, and that they must be found and exterminated. When this decision was arrived at, Johnny was not yet six.

At ten, he was not quite as happy as when he was younger. He'd noticed that he wasn't exactly like his playmates. They were as large as he was, but they had more legs, with claws on them, and stiff, furry hairs growing out of their exoskeletal shells. Johnny's two arms and two legs were smooth and hairless. He asked questions. His Khasr tutors told him sympathetically that his parents were traveling in a spaceship on which the monstrous creatures men had played a strange weapon. Because of that weapon he was not physically like other Khasr. But he was of a race of heroes, and when he grew up he would kill men by thousands and avenge the injury to himself and the insult to his race.

Johnny still believed he was a Khasr. But he had the psychology of a human boy. At ten years, a boy needs desperately to be exactly like everybody else. Denied this, Johnny acquired a personal blazing hatred for the race of men who had mutilated him. Ironically, while he hated mankind, he spoke only human speech. His companions and tutors spoke human speech to him. He didn't know there were different languages. But he proved there were different sorts of minds.

Somewhere around his tenth birthday he invented a new way of playing at murder. Zestfully he showed his crawling, stinking companions a new trick to kill men. He pretended that a make-believe spaceship was crippled, and left for the Khasr who pretended to be men to find. The make-believe men clustered around the imaginary ship. And Johnny exploded an imaginary bomb to destroy them all. It was an entirely new device, because the Khasr tradition was not even to let an enemy know that they existed. To leave a decoy ship violated that tradition. But it was a splendid trick to kill men!

Johnny's tutors praised him extravagantly. But inside they must have winced, because men had just played that exact trick on the Khasr. Near Llandu IV, a decoy-ship had exploded in the very center of an investigating Khasr fleet. Humans had acquired fragments of six Khasr ships to study, so they could learn something about Khasr weapons. Humans thought like Johnny. They invented the same kind of de-

vices, which Khasr could not imagine because of their traditions. The Khasr encouraged Johnny to think of more ways to kill humans. They had a better use for him later, but even now he could contrive ways to kill his fellows.

When he was thirteen, Johnny came up with a scheme for capturing a human ship intact. He'd never seen himself in a mirror—he didn't know mirrors existed—and he thought he was a Khasr, but he had the ingenuity of a human boy. Also he believed he had more reason to hate humans than anybody else. So he schemed a robot signaling device to be placed on some empty, useless world. It was harmless. But under the rocks, all about for miles, there would be placed radiation-bombs. A human ship would detect the signal and trace it. It would land to investigate the robot transmitter. And the radiation-bombs would go off. They would not shift rock or destroy anything. They would simply emit unthinkable quantities of lethal radiation—subatomic particles—which would kill any living thing nearby.

Again Johnny's tutors praised him. But inside, they must have hated him with a poisonous fury. Because humans had just played that trick, too! On the barren outermost world of Knuth, they'd set up just such a booby-trap. It had worked. Humans had wiped out the crews of two first-class space-battleships and had the ships, intact, with all the newest and most perfect weapons and instruments of the Khasr.

They raged. The Khasr loved glory—of their own particular variety—and to be out-murdered, out-sneaked, out-tricked by any other race was intolerable! The ultimate of humiliation was that non-Khasr creatures had looked upon Khasr—dead, but still Khasr—and lived to tell about it. The Khasr nation was filled with a sort of screaming fury of shame and frustration of men who had beaten them at their own game.

So matters progressed. Normally, Johnny was to have been used when he was a grown man. But he was almost fourteen, now, and the Khasr couldn't wait any longer. His tutors began to feed him carefully calculated bits of information. They delicately fanned his hatred of humankind to high pitch. And within a month of his fourteenth birthday Johnny thought he'd invented the idea for which he'd been captured in the first place, and for which he'd been nurtured and trained.

At that, he improved considerably on the idea the Khasr had had in the first place.

When he outlined the scheme—he trembled with eagerness—the Khasr seemed to be astonished at its brilliance. But, they objected, he was the only Khasr who could carry it out. It would call for special study on his part. It would even require, they told him—and the Khasr seemed to shudder—plastic operations to make him resemble men physically. He would have to pass for a human being!

Of couse, they added hastily, plastic surgery improved all the time. When his task was done they could restore him to his present appearance. In fact, though they hadn't told him before, they now told him they believed they could graft on his body the four extra legs he didn't have because of what men had done to him when he was young. Yes. If Johnny could carry out his stratagem, and destroy the very nucleus of the unspeakably revolting human race, he would be the greatest hero of the Khasr race!

And the Khasr were really pleased. Their original scheme had seemed plausible. Johnny's improvements seemed to doom the human race to extermination. With Earth wiped out, the scattered human colonies could be murdered one by one.

So during the next two or three months furry horrors of Khasr came and lectured to Johnny on the manners and customs of human beings, using human speech because Johnny didn't know there was any other. Other Khasr set up phoney surgical apparatus, and anesthetized Johnny, and later told him they had changed his appearance. Presently they showed him pictures of himself. He went sick. He looked human! When they thought he could stand the sight, they gave him a mirror looted from an Earth colony before its destruction, and set up vision-records so Johnny could see how humans walked and acted and their ways of using clothing, and how they used instruments to eat with.

Johnny learned. He hated it. He was bitterly ashamed. He hated mankind the more because he had to learn to pass for human. One thing that was bitter humiliation was that he could no longer wear the plastic sheaths, suitably furry, which they had provided for him to hide his soft white skin and let him look as much like a normal Khasr as possible. When Khasr saw him at the task of trying to cease to imitate their stilt-legged gait, and wearing human garments, and acting like the humans in the vision-records, the feeling of degradation was intolerable. But he ground his teeth and went on. He would be the greatest hero in the Khasr race!

He was all burning impatience after the Battle of Andromeda Two. After that, no true Khasr would hesitate at anything!

The battle was the aftermath of the human capture of two Khasr battleships intact. The humans had studied them and refitted their fleets with instruments to detect the Khasr drive. They'd found out how to nullify the Khasr coagulator-field, and they'd adapted a few new devices to work efficiently upon the technical apparatus the Khasr used.

And ultimately human ships discovered a Khasr murder-fleet near Andromeda Two. What seemed a suicide-ship dived into it. The Khasr delayed to murder it. And that suicide-ship had a very nice blow-out beam which burned out the Khasr interspace coils so they couldn't get away in faster-than-light escape. They had to stand and fight. And they didn't know how to fight, but only murder. Yet no Khasr could imagine surrender.

It wasn't really a battle but a very satisfying massacre, with the Khasr on the receiving end for a change. Not one ship, not one Khasr got away. Yet the Khasr did blow up most of their ships before the humans could board them.

Within a month, Johnny took off from the Khasr planet. He carried with him the foaming hatred of the Khasr race. They didn't show that they hated Johnny too, of course. There was a field turned black—the normal vegetation was purple, but it was hidden by the monstrous shapes gathered there—with a crowd of furry monsters assembled to see him off. They had carefully been trained to make human-seeming noises, and they cheered Johnny. And he rose toward the yellow sky with an inspiring memory of their clawed legs waving in farewell.

He began what he believed would be the most splendid war-feat of the Khasr race.

He could have been right.

The interspace field folded about his spaceship in the peculiarly deliberate manner of interspace fields. The stars and the twin suns of the Khasr planet gave place to a view of mere gray chaos which is all the viewplates show when a ship is in faster-than-light drive. And Johnny was alone. It was his first trip in space, but the ship—a huge one—was very nearly automatic. He didn't need to worry about astronavigation. He had only to pass for a human being, and the ship would be landed on Earth as a trophy, and then Johnny

would press one small button and that would be that. So he believed.

For the best part of a day he simply exulted in the splendid feat which he, a Khasr, would perform for the Khasr race. But then a very peculiar fact turned up. Not only was this his first trip in space. It was the first time he had ever been alone so long as he could remember. The Khasr had never left him in solitude. They were busy supervising his mind: conditioning him to remember that he was a Khasr and that he hated men.

But he suddenly discovered that he was lonely. He'd never known the sensation before.

Days passed. His ship went on and on through that nothingness in which speed beyond the speed of light is achieved. The ship's transmitter sent out a purposely crude imitation of a human recognition-signal as it went past the stars and planets of the void. The signal went back into normal space, of course, and was picked up. It was analyzed. Eyebrows raised at its characteristics. Humans have eyebrows. Khasr do not.

A message went on ahead of him, faster than light and even faster than Johnny's ship. The message said, *"A human recognition-signal, unofficial, is heading for Earth from a Khasr ship. Get him!"*

Action was taken upon that signal. In interspace a ship can gain speed or it can decelerate, but it must always be gaining kinetic energy or losing it. If it tries to achieve stasis it pops back into normal space again. It is not wholesome to pop back into normal space at several light-speeds. So nobody tried to intercept Johnny in interspace. Ships leaped to meet him where he would come out.

And Johnny grew lonely. He had never been alone for as much as five minutes. Now there was nobody to talk to and nothing to do for days. For weeks. For more weeks.

There was nothing to do. The ship was automatic. There were no vision-records, because it was a Khasr ship and human ones didn't belong in it, and Khasr ones would have had Khasr speech on them—which might have caused Johnny to think. There were no books. For the same reason. It was solitary confinement. It was worse. It was solitary confinement in a ship in that unreality which is not a cosmos, which is not actuality, which is not anything at all and which is called interspace. Technically, Johnny and his ship were unrealities. And Johnny was alone.

After the first week—his ears ringing, dizzy with the silence about him—he tapped the recognition-signal. Then he heard, over and over again, the message it broadcast.

"Human ship!" said the signal desperately. *"Heading for Earth! Prisoner escaping from Khasr!"*

There was never any answer. Naturally! But Johnny listened to it while loneliness ate at his vitals. A Khasr doesn't get lonely. A human does. Johnny went through an agonizing human experience, wholly inconsistent with his conviction that he was a Khasr. He had solitary confinement without even the break of a daily visit by a jailer. A week would rack the nerves of an adult human. A month would drive him mad. Fortunately, Johnny was fourteen years old and tougher than a human adult in such matters. But he had two months and a week and two days of it. . . . He was not a normal Khasr when the ship began to decelerate. He wasn't even an artificial one.

When the warning-drum boomed for pop-out—the Khasr didn't like the sound of bells—Johnny was hanging on to sanity by the knowledge that presently he would have to talk to men and persuade them that he also was human. He would talk to someone—something—that was alive. He would have the company of the monstrosities he had come to destroy. And he craved company so desperately that he actually wanted even human company.

Which the Khasr, of course, had been completely unable to anticipate.

With a leisurely unfolding of the interspace field, the Khasr ship popped back into normal space. There was a pale-yellow sun not far away—bright enough almost to have a disc. There was all the magnificence of the galaxy for Johnny to stare at, after chaos. There were the thousands of millions of stars of every imaginable color against a background of velvety black.

Johnny stared, trembling. And then his communicator growled, while his recognition-signal still babbled its message.

"You in the Khasr ship," said a sardonic voice. *"Any last words, or do we blast you now?"*

Johnny gasped. Then he saw the sleek Earthship, swimming grimly toward him through emptiness. He stabbed the communicator-button and moved in range.

"I—escaped from the Khasr," he gasped. "I—I— Please keep on talking!"

If the Khasr had heard him, they would have been wonderfully pleased. It was the one truly convincing thing he could have said. He heard a reflective whistle, and then a voice speaking aside from the microphone in the Earthship.

"Look at this! How good are those Khasr at making robots? Or is it really human?"

Johnny sweated. Robots do not sweat. Nor Khasr. He gulped: "I've been—alone since I left. S—somebody please come on board!"

That was part of the original scheme. The Khasr had hoped originally only for a suicidal dash of their ship into collision with Earth, with Johnny using his human form and voice to delude those who would have intercepted him. And *he* wouldn't know it was suicide. But this was better. Johnny had planned it. But he meant it differently now!

He trembled when the space-lock opened. He almost broke down when a human figure came out into the Khasr ship, blaster ready, and looked at him with suspicious eyes. He was gladder to see this human being than he'd ever been to see a Khasr. But he'd never been alone before. The Khasr couldn't imagine what loneliness would do to Johnny.

They had not imagined how Johnny, being just fourteen years old, would affect the humans who found him, either.

They took him off the Khasr ship—but he remembered enough to make them promise to let him come back to it—and a human crew moved it toward Earth. And Johnny was among mankind. He told them the story that had been planned, of course. He'd been captured as a baby, he said, and raised by the Khasr for study. He didn't know how true that was. And he said that three human prisoners had been brought in to the Khasr planet, and he talked to them, and the four of them made plans to steal a Khasr ship and get away. But when the three prisoners made their break they were killed, so he had to make the break alone. He had three authentic names to give, as those of the prisoners. His whole story was a masterpiece of synthesis by the Khasr psychologists.

The only trouble was that it fell to pieces instantly it was checked—though Johnny didn't know it. Space messages went among the stars, and men who knew the three

supposed prisoners were found. Johnny couldn't describe them. He didn't know the nicknames they called each other. His story was plainly a lie from beginning to end.

Also, a normal examination of the Khasr ship revealed that its whole substance was a highly unstable allotrope, which, however, was not radioactive. Yet when triggered it would explode in total annihilation of its own substance—not in fission explosion nor in fusion, but in annihilation—and they found the trigger. It would have set off the three-thousand-ton ship-bomb when it touched Earth, whether Johnny did anything or not. In fact, it was known from almost the first instant that Johnny was on a mission to destroy humankind, and that he was lying and still trying to carry it out.

The trouble was, of course, that he still believed himself a Khasr. The battleship was an alien environment to him. When they put him in a cabin by himself, it had four walls instead of eight. The bunk was on a shelf, not a soft cushion on the floor, and there was no sleeping-frame from which Khasr could have dangled in slumber by the hooks on their legs. Johnny didn't know that the cabin was a place to sleep in. He stayed in it because he was put there—the Khasr had not trained him to do anything but what he was told—and when someone came for him many hours later, he was shaking and panicky because of the strangeness. He was anguished when left alone.

They assigned a midshipman to introduce him to human ways. The midshipman's name was Mike, and he was red-haired and freckled, and had apparently been assigned to the battleship to get in the way of other people. He was not much older than Johnny, and he had no purpose in life except the blithe enjoyment of each moment as it came. He was very good for Johnny.

Tolerantly, he instructed Johnny in the eating and sleeping manners and customs of human beings. It was difficult for him to imagine anybody knowing more than he did, about anything, but he did ask some questions about the Khasr. However, he grew bored when Johnny essayed to answer him. He dismissed the Khasr as "spiders"—a new word to Johnny—and reverted to his normal preoccupations. They led to trouble. Specifically, there was a purloining of ship's edible stores, and Johnny was in the trouble with him. But Johnny blindly told the truth when questioned, because the Khasr had no prejudice against tattle-

tales. Mike did, though. Scornfully, he let Johnny know. Johnny had been surrounded by contempt and hatred all his life, but it had been hidden from him. Now, when Mike despised him, Johnny's loneliness was almost hysterical. When Mike angrily pushed him away, Johnny wildly and unskilfully hit back.

A fight began, but Johnny did not know how to fight, and Mike regarded him in open-mouthed amazement. Then he began to grasp the degree of Johnny's abysmal ignorance. In sudden large tolerance he instructed Johnny in the fine art of fist-fighting. Johnny acquired black eyes but he had Mike's tentative respect because he kept at the job of learning. One day out from Earth, he gave Mike a black eye. Then his throat went dry in apprehension.

"That's the way to do it!" said Mike warmly. "You're doing good!" Then he went to wheedle a poultice from the ship's cook.

When the vast bulk of Earth loomed out the ship's ports, Johnny shivered. Soon, he believed, he would be let back into the ship he'd brought, and he would press a certain stud, and all this ghastly race of human beings would be destroyed without anybody having felt an instant's uneasiness. Then he would go back to his fellow-Khasr.

But he shivered at the prospect. He had been two months and a week and two days absolutely alone in the Khasr ship. At fourteen years old, a human doesn't like to be alone. He had companionship among humans. Mike was his friend. He was older and felt much wiser and he treated Johnny with the consciously superior tolerance of an older brother. But he was a friend, and Johnny had never had a friend before. He'd had only officially appointed playmates and tutors. He yearned over Mike.

When the ground swelled up toward the ship he was tense and his throat ached. He saw the sky change to a lucent blue. He saw the mottled earth below him take on tints which were not the colors of the vegetation to which he was accustomed. He saw clouds. . . .

He was deathly pale when he walked out of the battleship. He moved rather like a sleepwalker. He saw a blue sky instead of a yellow one, and the grass was green instead of purplish. And it looked right! He'd never dreamed of a world like this. He'd never imagined the smells that greeted his nostrils. He was shaken; he was stunned—and he felt an

enormous welcoming in every molecule of the ground beneath him and every touch of air against his cheek. When he heard bird-songs, his throat swelled as if it would lock tight and strangle him. And he hadn't the least idea why. When he tried to ask Mike, humbly, his lips trembled and he couldn't form the words. There were even tears in his eyes and he was bitterly ashamed.

But Mike knew what was the matter. After all, Earth has been the home of human beings for hundreds of thousands of years. Every look and sound and smell of Earth has been part of the human heritage for thousands of generations. The feel of Earth is in the very germ-plasm of humanity. No other place, anywhere, can ever look wholly right to human eyes. So Johnny wasn't the first human being to see Earth for the first time and feel that desperate, overwhelming sensation of belonging which tells interstellar travelers that they have come home.

Mike put his arm gruffly about Johnny's shoulders.

"Everybody feels funny at first," he said curtly. "Hold everything. I've got to leave. You're coming along with me."

He said it casually, but it was a decision of a very high authority indeed, one who'd read all the reports on Johnny and his intended treason, and said, "Poor devil! We've got to do something for him!" So Mike had shore-leave and his family had uneasily agreed to take over Johnny until it was decided what could be done with him.

He didn't think much on the ride to Mike's home. He was dazed. He had trouble breathing. He saw trees. He saw grass. He saw birds flying. He heard the senseless, ineffably sweet sound of whirring insects in a field in sunshine.

When the ground-car stopped, Johnny was an explosive bundle of nerves. The car stopped at a house. It was utterly unlike an eight-sided tower under a yellow sky. It glowed warmly in the sunshine. Mike whooped and jumped out. A big brown animal with shaggy fur and only four legs came bounding frantically to meet him. The animal had a tail which wagged frantically, and he uttered yelps of joy. He and Mike rolled on the ground in a panting, squirming heap because they were glad to be together again. Then the door of the house opened and a woman and a girl came out. Johnny had never seen a woman before. Or a girl.

The girl's hair was red, like Mike's, and her eyes were intensely, tremendously blue. Mike gasped from the ground where he tumbled with the dog:

"That's my sister Pat, and that's my mother, Johnny."

The girl Pat was younger than Mike. Younger than Johnny. But she put out her hand and—he'd been instructed—Johnny accepted it. He was trembling. Like the dog which was glad to see Mike. This girl who smiled at him . . . Mike's mother smiling at him too . . .

When Mike's mother put her arms around him, Johnny went all to pieces. But people who have been born on other planets often go all to pieces when they first set foot on Earth.

A certain uneasiness was felt about Johnny, of course. He'd been raised to believe he was a Khasr, and he'd come to Earth to destroy the human race on their behalf. But at Mike's home he was with Mike, who was his friend. And there was Pat, whom Johnny tried to learn to treat with the grandly superior yet kindly manner of Mike himself. But it was not always easy to play a part, however passionately Johnny might want to. He saw the sun set for the first time. He saw sunrise. He saw the stars from Earth's surface, and the full moon floating in the sky. Mike's dog made friends with him—and to someone who'd been raised to think himself a Khasr, that was an overwhelming experience. Johnny couldn't pretend about that. He saw the sea, and flowers blooming. He tried to conceal the effect of all these things upon him. He tried to mimic Mike's blithe irresponsibility. But Mike's sister Pat grinned wickedly at him when he tried to use Mike's own very manner. She seemed to realize that Johnny was having, at fourteen—two years older than herself—all the experiences most people have as babies, when they're practically wasted. She bossed him a little, and he tried to patronize her.

Johnny was very happy in Mike's house and was treated as if he were Mike's brother, even by Mike's sister and his dog.

But there were moments when the unobtrusively watching adults had their doubts. There was the night when Pat came in the room where Johnny sweated to learn a game—and carefully think in terms of fair-play as humans thought of it and not as Khasr grandeur. Pat had a natural-history book in her hand.

"Johnny!" she said firmly, "I just thought! You've never seen spiders. Have you? Like this?"

Johnny looked at the page. There was a picture. Mike's mother glanced casually to see. She tensed a little. The pic-

ture was of a *Mygale Hentzii*—the American tarantula. It was a good-sized picture, magnified. The creature was eight-legged, with furry armor over its limbs. Its expression of implacable ferocity was shudder-inspiring. Johnny looked carefully.

"That looks like Tork," he said steadily. After a moment he added, "He raised me. He was my nurse . . . my teacher."

Pat looked blankly. Mike scowled at her. She looked apprehensively at her mother. Johnny noticed. He swung about and looked up.

"I've never been allowed to go back to the ship I came on," he said quietly. "And nobody says anything about the Khasr to me. People have found out what the purpose of my voyage to Earth was and what that ship was supposed to do, haven't they?"

Mike's mother drew her breath in sharply. She'd been advised to do what Johnny asked. She said matter-of-factly, "Yes. They found out." Johnny said thoughtfully, "It would have killed everything. Animals. Birds. Dogs. Everything. You and Pat, too. And Mike."

Mike's mother nodded.

"I know." She repeated, "They found out."

Johnny turned back to his game. Then he glanced again at the page of the natural-history book—at the tarantula.

"That does look a lot like Tork," he observed. "My move?"

So there was something less than complete satisfaction about Johnny's future as a human being. There was unease.

Next day Pat showed Johnny some spiders. Mike went looking for a web of one of the big yellow-banded garden ones, which weave bands of silk in the centers of their snares. But Pat led the way competently to the back of the ground-car shed. She expertly turned over stones and stirred up dried leaves. Then she said, "There, Johnny! There's a spider!"

Mike's mother was listening. Nobody knew exactly what was going on in Johnny's head, and it might be deplorable. He'd been raised to think he was a Khasr, and while he acted normally, now . . .

"That's like the picture," she heard Johnny say. "Sure! He doesn't look like Tork, though. He looks like the lecturer who came to teach me how to act when I pretended to be human."

There was a sudden movement. Mike's mother heard Pat

say, "What'd you do that for? People say if you kill a spider it'll make it rain!"

Johnny said with satisfaction, "I like when it rains. I like everything good on Earth." Then he said with a certain calm, masculine, brotherly generosity, "I can even stand you, Pat. You're a lot like Mike."

Within minutes of that moment a spaceship popped out of overdrive a very long distance away. It was, as it happened, the very same spaceship in which Johnny had spent two months, a week, and two days, on his journey to destroy the human race while he believed he was a Khasr. Humans had examined the ship and had taken samples of its material—which if properly triggered would detonate, not in atomic fission and not in atomic fusion, but in atomic annihilation—and they had put some extra equipment in it. They'd located the position of the Khasr planet by examining the automatic-control system that had guided the ship to Earth. But they'd put a robot pilot on board, to take over when this ship came back to normal space.

It popped out in the Khasr solar system, traveling forty-thousand miles a second. Its robot pilot made what turned out to be a very minor correction in its course. It sped for the Khasr home planet. At forty thousand miles a second, detectors are not much use. When a ship has to travel less than three seconds from pop-out to landing, they aren't any use at all.

They weren't, in this case. As a matter of fact, their attempt to report hadn't even been noticed when the ship from Earth touched the atmosphere of the Khasr planet.

So not a single one of the Khasr had even an instant's uneasiness before they all were dead.

De Profundis

I, SARD, MAKE REPORT TO the Shadi during Peace Tides. I have made a journey of experiment suggested by the scientist Morpt after discussing with me an Object fallen into Honda from the Surface. I fear that my report will not be accepted as true. I therefore await the consensus on my sanity, offering this report to be judged science or delirium as the Shadi may elect. . . .

I was present when the Object fell. At the moment I was in communication with the scientist Morpt as he meditated upon the facts of the universe. He was rather drowsy, and his mind was more conscientious than inspiring as he reflected —for the benefit of us, his students—upon the evidence of the Caluphian theory of the universe, that it is a shell of solid matter filled with water, which being naturally repelled from the center, acquires pressure, and that we, the Shadi, live in the region of greatest pressure. He almost dozed off as he reflected for our instruction that this theory accounts for all known physical phenomena, except the existence of the substance gas, which is neither solid nor liquid and is found only in our swim-bladders. For this reason, it is commonly assumed to be our immortal part, rising to the center of the universe when our bodies are consumed, and there exists forever.

As he meditated, I recalled the Morpt exercises by which a part of this gas may be ejected from a Shadi body and kept in an inverted receptacle while the body forms a new supply in the swim-bladder. I waited anxiously for Morpt's trenchant reasoning which denies that a substance—however rare and singular—which can be kept in a receptacle or replaced by the body can constitute its vital essence.

These experiments of Morpt's have caused great disturbances among scientific circles.

At the moment, however, he was merely a drowsy instructor, sleepily thinking a lecture he had thought a hundred times before. He was a little annoyed by a sharp rock sticking into his seventh tentacle, which was not quite uncomfortable enough to make him stir.

I lay in my cave, attending anxiously. Then, abruptly, I was aware that something was descending from above. The instinct of our race to block out thought-transference and seize food before any one else can know of it, operated instantly. I flowed out of my cave and swept to the space below the Object. I raised my tentacles to snatch it. The whole process was automatic—mind-block on, spatial sensation extended to the fullest, full focused reception of mental images turned upon the sinking Object to foresee its efforts to escape so that I could anticipate them—but every Shadi knows what one does by pure instinct when a moving thing comes within one's ken.

There were two causes for my behavior after that automatic reaction, however. One was that I had fed, and lately. The other was that I received mental images from within the Object which were startlingly tuned to the subject of Morpt's lecture and my own thoughts of the moment. As my first tentacle swooped upon the descending thing, instead of thoughts of fright or battle, I intercepted the message of an entity, cogitating despairingly, to another.

"My dear, we will never see the Surface again," it was thinking.

And I received a dazzling impression of what the Surface was like. Since I shall describe the Surface later, I omit a description of the mental picture I then received. But it gave me to pause, I believe fortunately. For one thing, had I swept the Object into my maw as instinct impelled, I believe I would have had trouble digesting it. The Object, as I soon discovered, was made of that rare solid substance which only appears in the form of artifacts. One such specimen has been repeatedly described by Glor. It is about half the length of a Shadi's body, hollow, pointed at one end, with one of its sides curiously flat with strangely shaped excrescences, openings, and two shafts and one hollow tube sticking out of it.*

*Query: Is this a description of a ship? Would the one flat side be a deck, the openings hatches, and the excrescences deckhouses, masts, and a funnel?

As I said, the Object was made of this rare solid material. My spatial sense immediately told me that it was hollow. Further, that it was filled with gas! And then I received conflicting mental images which told me that there were two living creatures within it! Let me repeat—there were two living entities within the Object, and they lived in gas instead of water!

I was stunned. For a long time I was not really aware of anything at all save the thoughts of the creatures within the Object. I held the Object firmly between two of my tentacles, dazed by the impossible facts I faced. I was most incautious. I could have been killed and consumed in the interval of my bewilderment. But I came to myself and returned swiftly to my cave, carrying the Object with me. As I did so, I was aware of startled thoughts.

"We've hit bottom—no! Something has seized us. It must be monstrous in size. It will soon be over, now. . . ."

Not in answer, but separately, the other entity thought only emotional things I cannot describe. I do not understand them at all. They represent a psychology so alien to ours that there is no way to express them. I can only say that the second entity was in complete despair, and therefore desired intensely to be clasped firmly in the other entity's two tentacles. This would constitute complete helplessness, but it was what the second creature craved. I report the matter with no attempt to explain it.

While flowing into my cave, I knocked the Object against the top of the opening. It was a sharp blow. I had again an impression of despair.

"This is it!" the first creature thought, and looked with dread for an inpouring of water into the gas-filled Object.

Since the psychology of these creatures is so completely inexplicable, I merely summarize the few mental images I received during the next short period which served to explain the history of the Object.

To begin with, it had been a scientific experiment. The Object was created to contain the gas in which the creatures lived, and to allow the gas to be lowered into the regions of pressure. The creatures themselves were of the same species, but different in a fashion for which we have no thought. One thought of itself as "man," the other as "woman." They did not fear each other. They had accompanied the Object for the purpose of recording their observations in regions of pressure. To make these observations, the Ob-

ject was suspended by a long tentacle from an artifact like the one of Glor's description.*

When they had observed, they were to have been returned to the artifact. Then the gas was to be released, and they would rejoin their fellows. The fact that two creatures could remain together with safety for both is strange enough. But their thoughts told me that forty or fifty others of the same species awaited them on the artifact, all equally devoid of the instinct to feed upon each other.

This appears impossible, of course, and I merely report the thought-images I received. However, while at the full length of the tentacle which held it, the tentacle broke. The Object therefore sank down into the regions of pressure in which we Shadi live. As it neared solidity, I reached up and grasped it and miraculously did not swallow it. I could have done so with ease.

When, in my cave, I had attended for some time to the thoughts coming from within the Object, I tried to communicate. First, of course, I attempted to paralyze the creatures with fear. They did not seem to be aware of the presence of mind. I then attempted, more gently, to converse with them. But they seemed to be devoid of the receptive faculty. They are rational creatures, but even with no mind-block up, they are completely unaware of the thoughts of others. In fact, their thoughts were plainly secret from each other.

I tried to understand all this, and failed. At long last a proper humility came to me, and I sent out a mental call to Morpt. He was still drowsily detailing the consequences of the Caluph theory—that in the center of the universe the gas which has escaped from the swim-bladders of dead Shadi has gathered to form a vast bubble, and that the border between the central bubble and the water is the legendary Surface.

Legends of the Surface are well-known. Morpt reflected, in sleepy irony, that if gas is the immortal part of Shadi, then since two Shadi who see each other instantly fight to the death, the bubble at the center of the universe must be the scene of magnificent combat. But his irony was lost

*Query: The bathysphere was suspended by a long cable from a ship?

upon me. I interrupted to tell him of the Object and what I had already learned from it.

I immediately felt other minds crowd me. All of Morpt's pupils were instantly alert. I blanked out my mind with more than usual care—to avoid giving any clue to the whereabouts of my cave—and served science to the best of my ability. I told, freely, everything I knew.

Under other conditions, I would have been proud of the furor I created. It seemed that every Shadi in the Honda joined the discussion. Many, of course, said that I lied. But I was fed, and filled with curiosity. I did not reveal my whereabouts to those challengers. I waited. Even Morpt tried to taunt me into an incautious revelation and went into a typical Shadi rage when he failed. But Morpt is experienced and huge. I could not hope to be the one to live did we meet each other outside of the Peace Tides.

Once I had proved I could not be lured out, however, Morpt discussed the matter dispassionately and in the end suggested the journey from which I have just returned. If, despite my caution where other Shadi were concerned—all of Morpt's pupils will recognize the challenging irony with which he thought this—if, despite my caution, I was not afraid to serve science, he advised me to carry the Object back to the Heights. From the creatures within it I should receive directions. From their kind I had my strength and ferocity as protections. From the Heights, themselves, Morpt urged his exercises as the only possible safeguards.

As I knew, said Morpt, the gas in our swim-bladders expands as pressure lessens. Normally, we have muscles which control it so that we can float in pursuit of our prey or sink to solidity at will. But he told me that as I neared the Heights I would find the pressure growing so small that in theory even my muscles would be unable to control the gas. Under such conditions I must use the Morpt exercises and release a portion of it. Then I could descend again.

Otherwise, I might actually be carried up by my own expanding gas, it might rupture my swim-bladder and invade other body cavities and expand still further, and finally carry me with it up to the Surface and the central bubble of Caluph's theory.

In such a case, Morpt assured me wittily, I would become one Shadi who knew whether Caluph was right or not, but I would not be likely to return to tell about it. Still, he insisted,

if I paused to use his exercises whenever I felt unusually buoyant, I could certainly carry the Object quite near the Surface without danger and so bring back conclusive evidence of the truth or error of the entire Caluphian cosmology, thus rendering a great service to science. The thoughts coming from within the Object should be of great assistance in the enterprise.

I immediately determined to make the journey. For one thing, I was not too sure that I could keep my whereabouts hidden if continually probed by older and more experienced minds. Only exceedingly powerful minds, like those of Morpt and the other instructors, can risk exposure to constant hungry inspection. Of course, they find the profit in their instructorships in such slips among their students. . . .

It would be distinctly wise for me to leave my cave, now that I had called attention to myself. So I put up my mind-block tightly and with the Object clutched in one tentacle, I flowed swiftly up the slope which surrounds Honda before other Shadi should think of patrolling it for me—and each other.

I went far above my usual level before I paused. I went so high that the gas in my swim-bladder was markedly uncomfortable. I did the Morpt exercises until it was released. It was strange that I did this with complete calm. But my curiosity was involved now, and we Shadi are inveterate seekers. So I found it possible to perform an act —the deliberate freeing of a part of the contents of my swim-bladder—which would have filled past generations of Shadi with horror.

Morpt was right. I was able to continue my ascent without discomfort. More, with increasing Height, I had much for my mind to think of. The two creatures—the man and the woman—in the Object were bewildered by what had happened to their container.

"We have risen two thousand feet from our greatest depth," the man said to the woman.

"My dear, you don't have to lie to make me brave," the woman said. "I don't mind. I couldn't have kept you out of the bathysphere, and I'd rather die with you than live without you."

Such thoughts do not seem compatible with intelligence. A race with such a psychology would die out. But I do not pretend to understand.

I continued upward until it was necessary to perform the

Morpt exercises again. The necessary movements shook the Object violently. The creatures within speculated hopelessly upon the cause. These creatures not only lack the receptive faculty, so that their thoughts are secret from each other, but apparently they have no spatial sense, no sense of pressure and apparently fail of the cycle of instincts which is so necessary to us Shadi.

In all the time of my contact with their minds, I found no thought of anything approximating the Peace Tides, when we Shadi cease altogether to feed and, therefore, instinctively cease to fear each other and intermingle freely to breed. One wonders how their race can continue without Peace Tides, unless their whole lives are passed in a sort of Peace Tide. In that case, since no one feeds during the Peace Tides, why are they not starved to death? They are inexplicable.

They watched their instruments as the ascent went on. Instruments are artifacts which they use to supplement their defective senses.

"Four thousand feet up," said the man to the woman. "Only heaven knows what has happened!"

"Do you think there's a chance for us?" the woman said yearningly.

"How could there be?" the man demanded bitterly. "We sank to eighteen thousand feet. There is still almost three miles of water over our heads, and the oxygen won't last forever. I wish I hadn't let you come. If only you were safe!"

Four thousand feet—whatever that term may mean—above the Honda, the character of living things had changed. All forms of life were smaller, and their spatial sense seemed imperfect. They were not aware of my coming until I was actually upon them. I kept two tentacles busy snatching them as I passed. Their body lights were less brilliant than those of the lesser creatures of the Honda.

I continued my flowing climb toward the Surface. From time to time, I paused to perform the Morpt exercises. The volume of gas I released from my swim-bladder was amazing. I remember thinking, in somewhat the ironic manner of Morpt himself, that if every Shadi possessed so vast an immortal part, the central bubble must be greater than Honda itself! The creatures inside the Object now watched their instruments incredulously.

"We are up to nine thousand feet," said the man dazedly. "We dropped to eighteen thousand, the greatest depth in this part of the world."

The thought "world" approximates the Shadi conception of "universe," but there are puzzling differences.

"We've risen half of it again," the man added.

"Do you think that the ballast dropped off and we will float to the Surface?" asked the woman anxiously.

The thought of "ballast" was of things fastened to the Object to make it descend, and that if they were detached, the Object would rise. This would seem to be nonsense, because all substances descend, except gas. However, I report only what I sensed.

"But we're not floating," said the man. "If we were, we'd rise steadily. As it is, we go up a thousand feet or so and then we're practically shaken to death. Then we go up another thousand feet. We're not floating. We're being carried. But only the fates know by what or why."

This, I point out, is rationality. They knew that their rise was unreasonable. My curiosity increased. I should explain how the creatures knew of their position. They have no spatial sense or any sense of pressure. For the latter they used instruments—artifacts—which told of their ascent. The remarkable thing is that they inspected those instruments by means of a light which they did not make themselves. The light was also made by an artifact. And this artificial light was strong enough to be reflected, not only perceptibly, but distinctly, so that the instruments were seen by reflection only.

I fear that Kanth, whose discovery that light is capable of reflection made his scientific reputation, will deny that any light could be powerful enough to make unlighted objects appear to have light, but I must go even further. As I learned to share not only consciously formed thoughts but sense-impressions of the creatures in the Object, I learned that to them, light has different qualities. Some lights have qualities which to them are different from other lights.

The light we know they speak of as "bluish." They know additional words which they term "red" and "white" and "yellow" and other terms. As we perceive difference in the solidity of rocks and ooze, they perceive differences in objects by the light they reflect. Thus, they have a sense which we Shadi have not. I am aware that Shadi are the highest

possible type of organism, but this observation—if not insanity—is important matter for meditation.

But I continued to flow steadily upward, pausing only to perform the necessary Morpt exercises to release gas from my swim-bladder when its expansion threatened to become uncontrollable. As I went higher and ever higher, the man and woman were filled with emotions of a quite extraordinary nature. These emotions were unbearably poignant to them, and it is to be doubted that any Shadi has ever sensed such sensations before. Certainly the emotion they call "love" is inconceivable to Shadi, except by reception from such a creature. It led to peculiar vagaries. For example, the woman put her twin tentacles about the man and clung to him with no effort to rend or tear.

"Darling!" she told him, filled with this strange sensation. "It's a miracle! Maybe a sea-serpent is carrying us up. We'll see the Surface again! We'll see the sky and the sun! And we'll have each other for always!"

The idea of two creatures of the same species pleasurably anticipating being together without devouring each other—except during the Peace Tides, of course—is almost inconceivable to a Shadi. However, it appeared to be part of their normal psychology.

But this report grows long. I flowed upward and upward. The creatures in the Object experienced emotions which were stronger and ever stronger, and more and more remarkable. Successively the man reported to the woman that they were but four thousand of their "feet" below the Surface, then two thousand, and then one. I was now completely possessed by curiosity. I had barely performed what turned out to be the last needed Morpt exercise and was moving still higher when my spatial sense suddenly gave me a new and incredible message. Above me, there was a barrier to its operation.

I cannot convey the feeling of finding a barrier to one's spatial sense. I was aware of my surroundings in every direction, but at a certain point above me there was suddenly —nothing! Nothing! At first it was alarming. I flowed up half my length, and the barrier grew nearer. Cautiously—even timorously—I flowed slowly nearer and nearer.

"Five hundred feet," said the man inside the Object. "My heavens, only five hundred feet! We should see glimmers of light through the ports. No, it's night now."

I paused, debating. I was close enough to this barrier to reach up my first tentacle and touch it. I hesitated a long time. Then I did touch it. Nothing happened. I thrust my tentacle boldly through it. It went into Nothingness. Where it was there was no water. With an enormous emotion, I realized that above me was the central bubble and that I alone of living Shadi had reached and dared to touch it. The sensation in my tentacle within the bubble, above the Surface, was that of an enormous weight, as if the gas of departed Shadi would have thrust me back. But they did not attack, they did not even attempt to injure me.

Yes, I was splendidly proud. I felt like one who has overcome and consumed a Shadi of greater size than himself. And as I exulted, I became aware of the emotions of the creatures within the Object.

"Three hundred feet!" said the man frantically. "It can't stop here! It can't! My dear, fate could not be so cruel!"

I found pleasure in the emotions of the two creatures. They felt a new emotion, now, which was as strange as any of my other experiences with them. It was an emotion which was the anticipation of other emotions. The woman named it.

"It is insane," she told the man, "but somehow I feel hope again."

And in my pleasure and intellectual interest it seemed a very small thing for one who had already dared so greatly to continue the pleasures I felt. I flowed further up the slope. The barrier to my spatial sense—the Surface—came closer and ever closer.

"A hundred feet," said the man in an emotion which to him was agony, but because of its novelty was a source of intellectual pleasure to me.

I transferred the Object to a forward tentacle and thrust it ahead. It bumped upon the solidity which here approached and actually penetrated the Surface. The man experienced a passion of the strong emotion called "hope."

"Twenty-five feet!" he cried. "Darling, if we start to go down again, I'll open the hatch, and we'll go out as the bathysphere floods. I don't know whether we're near shore or not, but we'll try."

The woman was pressed close against him. The agony of hope which filled her was a sensation which mingled with

the high elation I felt over my own daring and achievement. I thrust the Object forward yet again. Here the Surface was so near the solidity under it that a part of my tentacle went above the Surface. And the emotions within the Object reached a climax. I thrust on, powerfully, against the weight within the Bubble, until the Object broke the surface, and then on and on until it was no longer in water but in gas, resting upon solidity which was itself touched only by gas.

The man and woman worked frantically within the Object. A part of it detached itself. They climbed out of it. They opened their maws and uttered cries. They wrapped their tentacles about each other and touched their maws together, not to devour but to express their emotions. They looked about them dazed with relief, and I saw through their eyes. The Surface stretched away for as far as their senses reported, moving and uneven, and yet flat. They stood upon solidity from which things projected upward. Overhead was a vast blackness, penetrated by innumerable small bright sources of light.

"Thank God!" said the man. "To see trees and the stars again."

They felt absolutely secure and at peace, as if in a Peace Tides enhanced a thousand fold. And perhaps I was intoxicated by my own daring or perhaps by the emotions I received from them. I thrust my tentacles through the Surface. Their weight was enormous, but my strength is great also.

Daringly I heaved up my body. I thrust my entire forepart through the Surface and into the central bubble. I was in the central bubble while still alive! My weight increased beyond computation, but for a long, proud interval I loomed above the Surface I saw with my own eyes—all eighty of them—the Surface beneath me and the patch of solidity on which the man and the woman stood. I, Sard, did this!

As I dipped below the Surface again I received the astounded thoughts of the creatures.

"A sea-serpent," thought the man, and doubted his own sanity as I fear mine will be doubted. "That's what did it."

"Why not, darling?" the woman said calmly. "It was a miracle, but people who love each other as we do simply couldn't be allowed to die."

But the man stared at the Surface where I had vanished. I had caught his troubled thought.

"No one would believe it. They'd say we're insane. But

confound it, here's the bathysphere, and our cable did break when we were above the Deep. When we're found, we'll simply say we don't know what happened and let them try to figure it out."

I lay resting, close to the Surface, thinking many things. After a long time there was light. Fierce, unbearable light. It grew stronger and yet stronger. It was unbearable. It flowed down into the nearer depths.

That was many tides ago, because I dared not return to Honda with so vast a proportion of the gas in my swim-bladder released to the central bubble. I remained not too far below the Surface until my swim-bladder felt normal. I descended again and again waited until my "immortal part" had replenished itself. It is difficult to feed upon such small creatures as inhabit the Heights. It took a long time for me to make the descent which by Morpt's discovery had been made so readily as an ascent. All my waking time was spent in the capture of food, and I had little time for meditation. I was never once full-fed in all the periods I paused to wait for my swim-bladder to be replenished. But when I returned to my cave, it had been occupied in my absence by another Shadi. I fed well.

Then came the Peace Tides. And now, having bred, I lay my report of my journey to the Surface at the service of all the Shadi. If I am decreed insane, I shall say no more. But this is my report. Now determine, O Shadi: Am I mad?

I, Morpt, in Peace Tides, have heard the report of Sard and having consulted with others of the Shadi, do declare that he has plainly confounded the imagined with the real.

His description of the scientific aspects of his journey, and which are not connected with the assumed creatures in the Object, are consistent with science. But it is manifestly impossible that any creature could live with its fellows permanently without the instinct to feed. It is manifestly impossible that creatures could live in gas. Distinction between light and light is patent nonsense. The psychology of such creatures as described by Sard is of the stuff of dreams.

Therefore, it is the consensus that Sard's report is not science. He may not be insane, however. The physiological effects of his admitted journey to great Heights have probably caused disorders in his body which have shown themselves in illusions. The scientific lessons to be learned from

this report is that journeys to the Heights, though possible because of the exercises invented by myself, are extremely unwise and should never be made by Shadi. Given during the Peace Tides. . . .

Things--

Things that creep, crawl and crouch in dark corners of space and time. Things that run, fly and chase through the endless night. And things that just sit and wait.

Here are stories of the inhuman and nonhuman, the strange creatures from way out there.

Such as Alyx, the only living thing on his world—because there wasn't room for anything else.

And those crazy, inhuman things called Mocklins, who could make their children into whatever they wished. Mocklins admired human genius and human deviltry . . . and they were quick to multiply both a hundredfold.

Or those vegetable creatures who greeted the earth expedition near Proxima Centauri. They, too, loved humans—preferably raw.

And there are others even more ghastly.

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